

HARVARD UNIVERSITY.



LIBRARY

OF THE

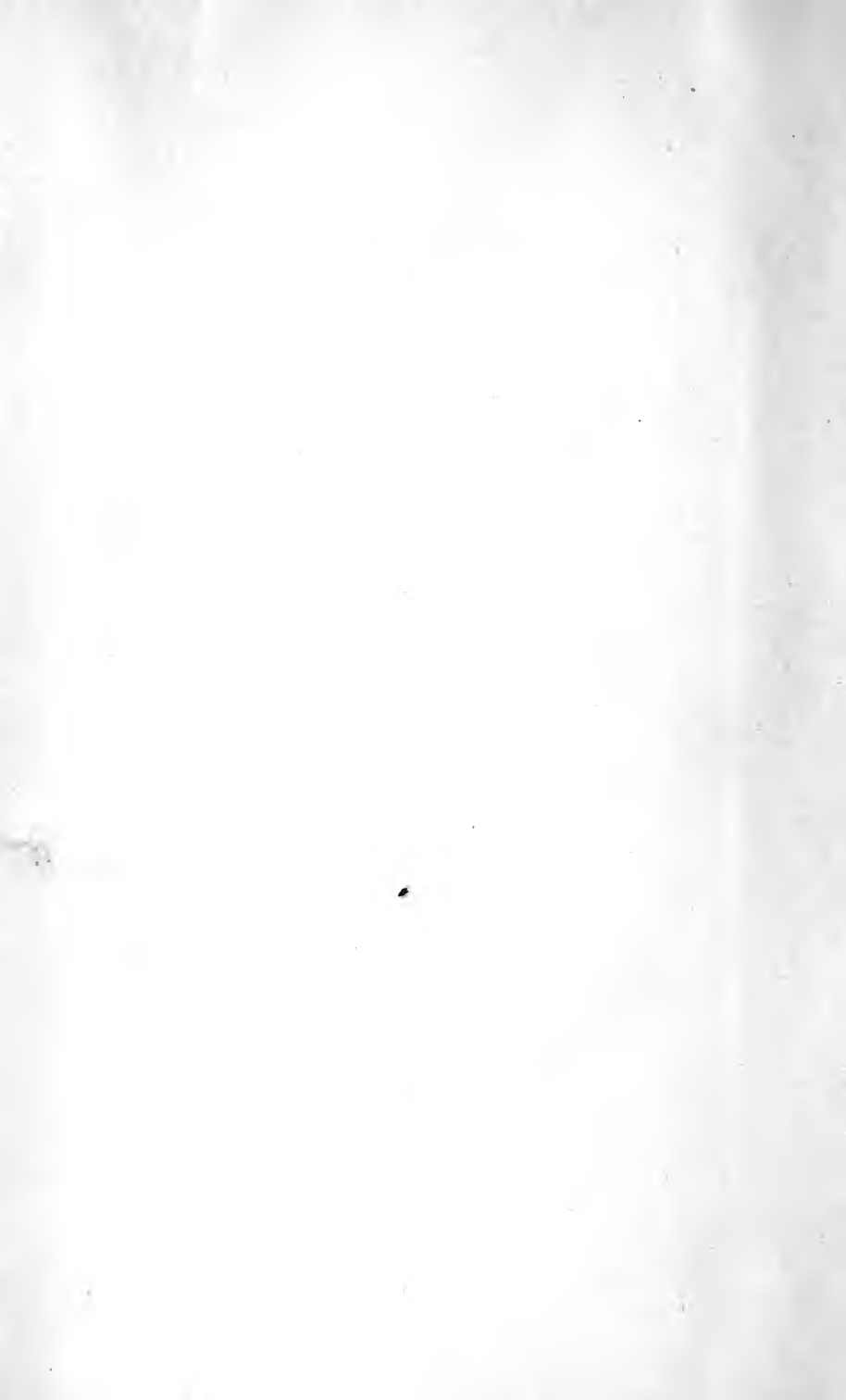
MUSEUM OF COMPARATIVE ZOÖLOGY.

558179.

Exchange.

May 12, 1882 - May 26, 1886.





5179. May 12. 1882.

BULLETIN
OF THE
NATURAL HISTORY SOCIETY
OF
NEW BRUNSWICK.

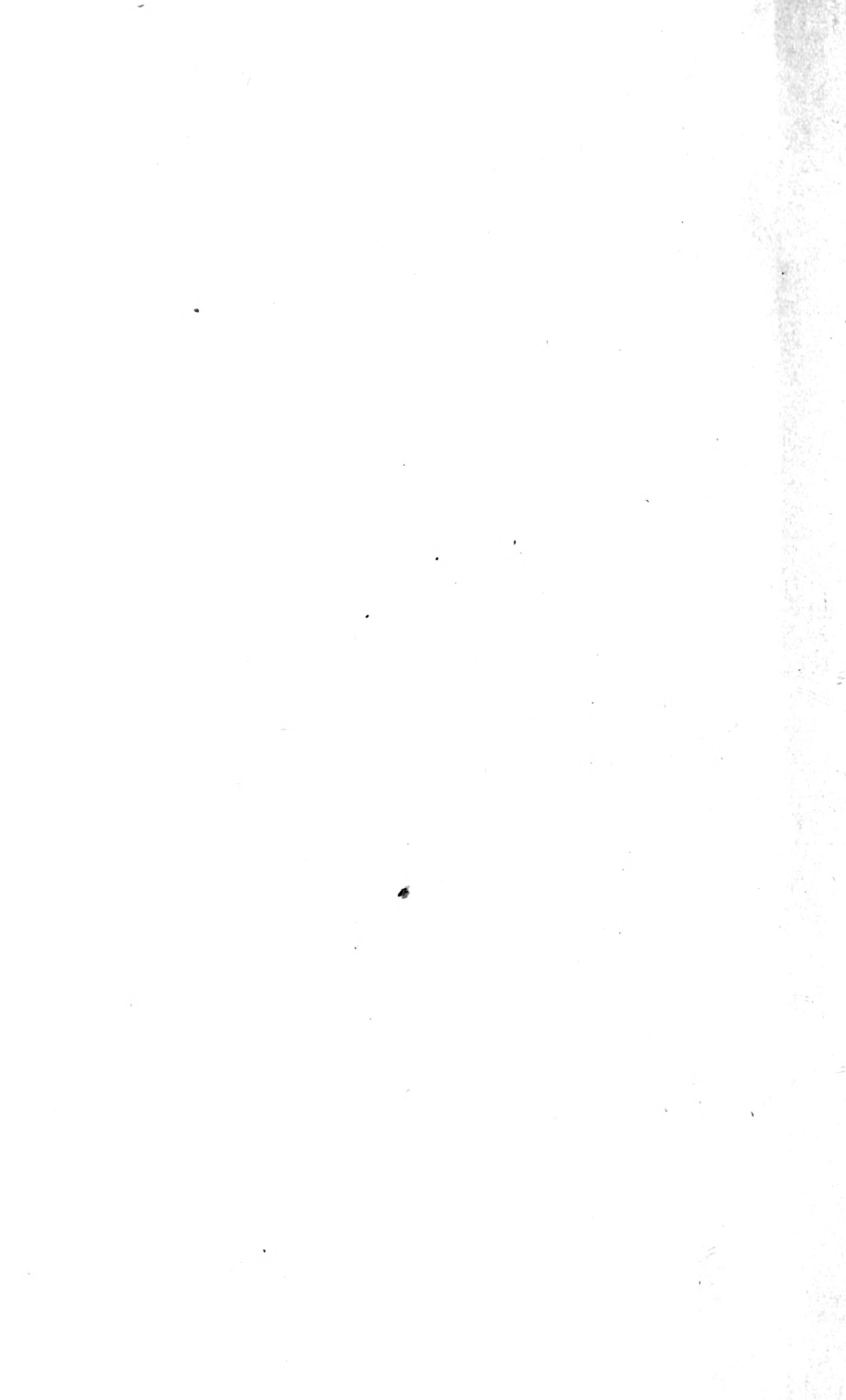
No. I.

CONTENTS.

<i>Summary of Meetings in 1881,</i>	5
<i>Annual Report of the Council,</i>	9
<i>List of Donations to the Museum and Library,</i>	13
<i>Report of the Committee on Botany,</i>	17
<i>List of Additions to Catalogue of N. B. Plants, by Geo. U. Hay, Robert Chalmers, and James Vroom,</i>	19
<i>Catalogue of the Birds of New Brunswick, with Notes, by M. Chamberlain,</i>	25
<i>Officers of the Society and Committees for 1882,</i>	69
<i>List of Members of the Society,</i>	71

PUBLISHED BY THE SOCIETY.

SAINT JOHN, N. B.
J. & A. McMILLAN, 98 PRINCE WILLIAM STREET.
1882.



BULLETIN

OF THE

NATURAL HISTORY SOCIETY

OF

NEW BRUNSWICK.

No. I.

CONTENTS.

<i>Summary of Meetings in 1881,</i>	5
<i>Annual Report of the Council,</i>	9
<i>List of Donations to the Museum and Library,</i>	13
<i>Report of the Committee on Botany,</i>	17
<i>List of Additions to Catalogue of N. B. Plants, by Geo. U.</i> <i>Hay, Robert Chalmers, and James Vroom,</i>	19
<i>Catalogue of the Birds of New Brunswick, with Notes, by</i> <i>M. Chamberlain,</i>	25
<i>Officers of the Society and Committees for 1882,</i>	69
<i>List of Members of the Society,</i>	71

PUBLISHED BY THE SOCIETY.

SAINT JOHN, N. B.

J. & A. McMillan, 98 PRINCE WILLIAM STREET.

1882.

ag 16
1000.000

ADVERTISEMENT.

THE want of a medium of publication of its proceedings, etc., has been felt for some time by the NATURAL HISTORY SOCIETY, and the issue of this BULLETIN has been commenced to supply this want.

It is intended to continue the publication in this form, from time to time, of original articles read before the Society; and the Council request that other Societies and Public Bodies who may receive it, will send their publications in return.

M. CHAMBERLAIN,
ROBERT CHALMERS,
GEORGE U. HAY,

Publishing Committee.



BULLETIN
OF THE
NATURAL HISTORY SOCIETY OF NEW BRUNSWICK.

No. I. — 1882.

SUMMARY OF MEETINGS.

SAINT JOHN, *February 1st, 1881.*

AT the regular meeting of the Society this evening, Dr. BOTSFORD in the chair, G. F. MATTHEW, Esq., delivered an address, showing in brief the work done by geologists in this Province during the past forty-two years.

March 1st, 1881.

Mr. ROBERT CHALMERS read a paper this evening on the evidences of glacial action on the shores of the Baie de Chaleur. He described this evidence, which seemed to point unmistakably to the fact that the bed of this Bay was once the seat of a glacier, some one hundred and fifty miles in length, twenty-five to fifty in width, and in some places not less than one thousand feet in depth, moving eastward, and being probably a small independent glacier, — a portion left on the breaking up of the great ice sheet which had previously extended over the whole of this section of the continent.

April 5th, 1881.

A paper on "Medicinal Plants," from the pen of Dr. DUNCAN, of Bathurst, was read this evening, and, on motion, was ordered to be published.

May 3rd, 1881.

Dr. L. C. ALLISON delivered an address at the regular meeting this evening on "Diatoms," illustrating his remarks by diagrams and by microscopic preparations.

June 7th, 1881.

At the regular meeting this evening the President, Dr. BOTSFORD, had occasion to congratulate the members on their occupying new and commodious apartments in the Market Building. He reviewed the history of the Society, and expressed satisfaction at its sound position and good prospects.

Dr. COLEMAN delivered an address on the "Circulation of the Blood."

July 5th, 1881.

This being the first regular meeting of the Society after the field meeting of June, the leaders of the different sections of that day were called upon for reports, and responded as follows: Dr. L. C. ALLISON, address on Invertebrates, illustrated by specimens and diagrams; Mrs. C. E. HEUSTIS, on Entomology, with specimens; Mr. G. U. HAY, on Botany, with specimens, notably the *Drosera rotundifolia*, with experiments illustrating the apparently insectivorous nature of this plant; Mr. MATTHEW, on the Geology of Torryburn Lake District.

August 2nd, 1881.

Vice-President GEN. WARNER presided at the meeting held this evening. A paper on the *Radiata* was read by Professor BAILEY of New Brunswick University.

September 6th, 1881.

The paper of the evening was read by Mr. C. H. FLEWELLING, and was a history of the growth and progress of Engraving and Printing.

October 4th, 1881.

A collection of plants from A. I. TRUEMAN, Esq., representing the flora of sections of the Upper Saint John, and portions of the

County of Westmorland, was presented to the Society. The paper of the evening, on the "Growth of the English Language," was read by G. HERBERT LEE, Esq.

November 1st, 1881.

Notice was given that the rooms of the Society would be open to members on the evening of the third Tuesday of each month as well as on the first Tuesday. The paper of the evening, on "Applied Chemistry," was read by Mr. W. F. BEST. He laid stress on the fact that much raw material in the Province which might be utilized is either suffered to lie idle or go to waste: as hardwood, for the manufacture of acetic acid; and charcoal-ammونيا, a by-product of the gas works of this city, and others.

December 6th, 1881.

A paper on the "Birds of Prey of New Brunswick" was read by Mr. M. CHAMBERLAIN. Many points of interest are embodied in a Catalogue of the Birds of the Province, prepared by Mr. CHAMBERLAIN, and published in this Bulletin.

January 3rd, 1882.

The paper of this evening was read by Mr. W. N. GOULD, on the "Insects injurious to the Coniferæ of New Brunswick." The principal of these, said Mr. Gould, belonged to the order Coleoptera, and to the families Scolytidæ, Prionidæ, Callidium, &c. The bark beetles—sappers and miners of the army—belong to the first family. These and their methods of work and results were described by Mr. Gould, as were also the members of other families. The enemies of these destroyers were the birds, and they were doing a noble work. The black-capped and Hudson Bay titmouse, sparrows and other common birds are very active in the destruction of these pests; but there is no hope of the birds being able to check the increase of these insects as long as the farmer allows his stumps to stand until they rot, instead of burning them the first year, and as long as he builds his fences of ever-

green trees without first stripping off the bark. The tops, limbs, and stumps left to rot by lumberers are vast nurseries of insects, which are sending forth ever increasing armies which, if not arrested, will in a few years destroy the young coniferous forests of New Brunswick. The only check to the multiplication of these pests is to burn all stumps, tops, brush, and injured trees each year, wherever man destroys the forest.



ELEVENTH ANNUAL REPORT

OF THE

NATURAL HISTORY SOCIETY OF NEW BRUNSWICK.

SAINT JOHN, *January 17th, 1882.*

THE eleventh annual meeting of this Society was held in their rooms in the Market Building this evening, Dr. LEB. BOTSFORD, President, in the chair.

After some routine business was disposed of, the Recording Secretary presented the annual report of the Council, which, on motion, was received and ordered to be entered on the Minutes, and is as follows :

The Council of the NATURAL HISTORY SOCIETY OF NEW BRUNSWICK, in presenting their eleventh annual report, feel warranted in congratulating the members on the success which has attended their efforts during the past year in the prosecution of those objects for which the Society was formed, and on the satisfactory progress which has been made. The details of this progress will be briefly brought before you under the various heads.

During the year arrangements have been made for the admission of ladies as associate members to certain of the privileges of the Society.

The roll of membership is as follows, viz :

- 1 Honorary member.
- 6 Life members.
- 60 Ordinary members.
- 17 Associate members.
- 22 Corresponding members.

Twelve regular monthly meetings have been held during the year, at which papers were read by members of the Society, several of them containing original information. These papers, with

the names of the gentlemen who read them, have been already referred to in the summary of proceedings of meetings.

Arrangements have also been made within the past year to have the rooms of the Society open to members and their friends, and teachers in the public schools, on the evening of the third Tuesday in each month, and on these occasions informal addresses upon elementary scientific subjects will be delivered.

In March the Society held a *Conversazione* in the Museum, Library, etc., of the Mechanics' Institute. It was well attended, and was successful in every respect.

A field meeting was also held at Torryburn on the afternoon of June 25th. The results of the scientific work done on that occasion were laid before the Society at the regular July meeting.

In May last the City Corporation kindly placed at the disposal of the Society rooms on the third floor of the Market Building. One of these rooms is now used for the meetings; another is occupied as a work-room; and it has been determined during the ensuing year to fit up a third with cases for the preservation and display of the interesting collection of native birds which, through the indefatigable labors of Mr. CHAMBERLAIN and other members of the Ornithological Committee of this Society, has been added to the Museum during the past summer. The cost of these cases is estimated at nearly four hundred dollars; and an appeal will be made to the friends of the Society and the public for aid in carrying out this object. Your Council has much pleasure in stating that already several of the leading citizens of Saint John have made handsome contributions to the Society.

The Treasurer reports that the expenditure has been within the income during the past year, notwithstanding the fact that extra expenses had to be incurred in fitting up the rooms, etc.

The Librarian reports the purchase of an additional book-case during the year, and the receipt of a number of books, pamphlets, maps, charts, etc., donated to the Society, as well as several acquired by purchase. These will be found catalogued elsewhere in this Report.

The Corresponding Secretary reports that to several of the corresponding members the Society is indebted for contributions, viz: to Dr. G. M. DUNCAN, of Bathurst, for an interesting paper

on "Some Medicinal Plants of New Brunswick," referred to in another place in this report; to S. W. HATHEWAY, Esq., of Boston, for a paper on "The Chemical Effects of Alcohol;" to HENRY WILMOT, Esq., of Fredericton, for a set of maps and the Report of Progress of the Geological Survey of Canada, 1878-79, and to Mr. JAMES VROOM, of Saint Stephen, for important and valuable assistance rendered to the Botanical Committee in preparing the list of plants appended hereto. The Council take this opportunity of expressing a wish that other corresponding members would furnish the Society with papers and contributions from time to time; as many of them, from their knowledge of the natural resources of the Province, are in a position to collect facts of great interest and value.

REPORT OF THE CURATORS.

THE Curators do not feel able to present a full and connected report on the condition of the Museum, owing to the fact that most of the collections have been packed up in order that the cases in which the minerals, etc., were contained might be temporarily used to protect the birds until others better adapted for them could be procured.

Since the last annual meeting most of the collections have been removed from the Museum of the Mechanics' Institute to the rooms now occupied by the Society in the Market Building. Among these are the minerals, most of the fossils, the radiates and the birds. There still remain at the Institute the other vertebrate and invertebrate animals, some fossils, and the archæological collections. All the cases have been removed from the Institute except the large centre case.

Numerous additions have been made to the Museum in several of its departments during the past year. The largest contribution is from the Ornithological Committee, the members of

which have worked with great zeal during the past summer, and have added to the collection about one hundred and fifty mounted specimens of native birds.

Another valuable gift is that of Messrs. HAY and CHALMERS. This consists of about four hundred species of the native plants of the Province, mounted and labelled. Most of the flowering plants of New Brunswick are therefore now in the collection, and are available to members of the Society for study and comparison. A large number of minerals have also been added, among which the donation of JOHN KERR, Esq., of ores from the Rocky Mountains, is worthy of special mention. Mrs. HEUSTIS has taken charge of and mounted a number of insects presented by various friends and members of the Society.

The Curators call attention to the urgent need which exists for cases to contain, protect, and exhibit the collection of birds already referred to, now one of the most valuable and useful portions of the Museum, and would respectfully urge upon the Society the necessity of fostering and encouraging the work so well begun in this department by providing a set of cases that will not only meet the present demand, but will, to some extent, anticipate future additions to the collection. To the general public a well arranged collection of mounted birds is one of the most attractive parts of a Museum, and if it is intended that these birds should be made useful to the citizens by throwing open the rooms at certain times and exhibiting them, suitable cases to contain them are absolutely required.

Signed for the Curators, and

Respectfully submitted,

G. ERNEST FAIRWEATHER,

Recording Secretary.



DONATIONS TO THE MUSEUM,

FOR THE YEAR ENDING JAN. 17, 1882.

DONORS' NAMES.	DONATIONS.
The Committee on Ornithology per Mr. CHAMBERLAIN,	146 specimens of Native Birds of New Brunswick, mounted.
E. O. DAMON, Esq., Northampton, Mass.,	1 rough-legged Hawk (black phase). 2 Sparrow Hawks (male and female), all mounted.
Mr. J. H. CARNELL,	5 specimens of Native Birds, mounted.
Mr. J. MORRISON,	1 chestnut-sided Warbler, mounted ; 2 Cedar Birds.
Mrs. W. W. TURNBULL,	1 short-eared Owl, mounted.
Mr. W. N. GOULD,	7 specimens of Native Birds, mounted.
W. H. PURDY, Esq.,	1 Bald Eagle (young).
Mr. R. ROWE,	2 Herring Gulls.
Mr. J. HAMMOND,	2 three-toed Woodpeckers.
Mr. G. DEVEBER, Gagetown,	2 Hudsonian Godwits.
Mr. HERBERT W. HARRISON,	1 Scaup Duck ; 1 Horned Grebe.
E. C. SUTTON, Esq.,	1 Goshawk. (The unmounted Birds were mounted by mem- bers of the Committee on Ornithology).
Mr. KILGOUR SHIVES,	Bituminous Coal, stigmaria and red and grey ochres from Dunsinane, K. C.
Dr. A. C. SMITH, Newcastle,	Fossil Fern (Pecopteris) from coal mea- sures, Clifton, Gloucester County ; and Calamites and Dadoxylon from Newcastle, Miramichi.

DONATIONS TO THE MUSEUM — (*Continued*).

DONORS' NAMES.	DONATIONS.
JOHN KERR, Esq.,	Ores, minerals, and fossils from Utah.
Mr. ROBERT CHALMERS,	Ores of silver and galena, from Nigadoo and Gloucester silver mines, Gloucester County.
Dr. L. C. ALLISON,	Sand dollars (Clypeaster), and a fossil fern (Pecopteris); also specimens of barnacles and worm-eaten wood.
Mr. THOMAS W. LEE, Rothsay,	Specimen of <i>Luna</i> moth.
Master W. D. MATTHEW,	A spotted lizard or salamander, from Dark Lake.
Mr. ALBERT VENNING,	A moth.
Mr. W. J. STARR,	Coral growth from wooden stump from bottom of St. Thomas harbor.
Mr. G. F. MATTHEW,	Fresh-water Pulmonates from Torryburn Lake.
Mrs. C. E. HEUSTIS,	Snails (<i>succinea</i>) and a lizard; A number of insects such as are now ravaging the pine forests of Canada; A specimen of the apple-tree borer.
Prof. L. W. BAILEY, Fredericton,	A specimen of the Basket-Fish, from Friar's Road, Eastport.
Mr. G. U. HAY,	Specimen of the Sundew (<i>Drosera</i>).
Mrs. G. A. HAMILTON,	Liverwort from Portland.
Mr. A. I. TRUEMAN,	Collection of dried plants from Westmorland County.

DONATIONS TO THE LIBRARY.

DONORS' NAMES.	DONATIONS.
NATURAL HISTORY SOCIETY OF MONTREAL,	Canadian Naturalist for the year.
Dr. LEB. BOTSFORD,	Maps of the Geological Survey of Canada for N. B., 1878-79.
ESSEX INSTITUTE, Salem, Mass.,	Bulletin, Vol. 12, Nos. 7, 8 and 9. " Vol. 13, Nos. 1-6.
EDITORS,	Maine Mining Journal.
ESSEX INSTITUTE,	Visitors' Guide to Salem.
HENRY WILMOT, Esq., Fredericton,	Report, 1878-79, and Maps of Geological Survey of Canada.
Mr. JOHN HAMMOND,	Reports of the second Geological Survey of Pennsylvania, as follows:— CCC. Lancaster County and Atlas. GG. Lycoming and Sullivan Counties, with Maps. GGG. Potter County, with Maps and Sections. III. Oil Regions, with Maps and Charts. R. McKean County, with Maps and Charts. T. Blair and adjoining Counties, with Maps.
Mr. G. F. MATTHEW,	Proceedings of the Society Malacologique de Belgique for Feb'y, March, April, and May, 1881.

REPORT OF THE COMMITTEE ON BOTANY.

THE Committee on Botany report that they have been engaged during the past week in determining plants which have been collected in several sections of the Province during the past two seasons of 1880 and 1881. They have found their labors comparatively easy, having been guided greatly by the valuable lists published in 1879 and early in 1880 by Prof. JAS. FOWLER. In addition to the plants named in these lists they find that about FORTY species new to the Province have been detected, and that many plants which were supposed to be rare, or limited to certain localities, are more widely distributed and occur in different sections of New Brunswick. In the list appended hereto the names of these species and details regarding the distribution of some of the rarer forms will be given, and other facts will be brought out, showing that in several districts the botany of our country is now being attentively studied by the increasing numbers of amateurs and others interested in the subject.

But while viewing with much satisfaction the progress made in arriving at a knowledge of our Flora during the past few years, which is largely due to the zeal and untiring labors of Prof. FOWLER, and the enthusiasm he awoke in a few others, your Committee would recall the fact that the botany of the Province, taken as a whole, is yet far from being known. No section of it, indeed, has been systematically studied, except, perhaps, the County of Kent, where Mr. FOWLER resided for many years. The ambitious and enterprising student will therefore find here, for many years to come, a most inviting field for his investigations. Besides the County of Kent, the only districts which have been at all examined botanically are: portions of York County in the vicinity of Fredericton and Keswick, by Prof. BAILEY, Prof. FOWLER, and others; Saint John County by Messrs. G. F. and R. MATTHEW, Prof. FOWLER, and Mr. G. U. HAY; certain parts of Charlotte County by Mr. JAS. VROOM; and of Restigouche and Gloucester

Counties by Prof. FOWLER and Mr. R. CHALMERS. The Flora of the central and western portion of the Province is comparatively unknown, having scarcely been looked upon yet by the eye of the botanist.

The contributions and donations to this Society having reference to our Flora, so far as we can ascertain, are as follows: A list of the Plants of New Brunswick, collected previous to 1864, and read before the Society on 8th April of that year, by Mr. R. MATTHEW; an original and interesting paper by Mr. G. F. MATTHEW, "On the Occurrence of Arctic and Western Plants in Continental Acadia in 1869;" and during the past year a valuable Herbarium added to the Museum by Mr. G. U. HAY. This Herbarium consists of over three hundred and fifty species of our phœnogamous plants, besides specimens of nearly all our grasses, sedges, and ferns, the whole mounted and labelled. To these Mr. CHALMERS adds a considerable number of plants, representatives of the Flora of the northern section of the Province. Mr. JAMES VROOM has recently sent in a collection from Charlotte County, some of them rare and valuable; Mr. J. MOSER, specimens from York County; and Mr. ARTHUR I. TRUEMAN a number of plants collected chiefly in Westmorland County; so that our Herbarium now represents a Flora of nearly six hundred species.

The thanks of the Committee are due to Mr. J. MOSER, of Nashwaak; Mr. J. BRITTAIN, of Petitcodiac; Mr. A. I. TRUEMAN, of St. John; Mr. G. H. BURNETT, of Keswick, and other gentlemen, for specimens collected in their neighborhood.

In the following catalogue of plants we have used the numbers in Prof. FOWLER's lists.

GEO. U. HAY,
ROBERT CHALMERS,
JAS. VROOM,

Committee on Botany of Nat. Hist. Society of N. B.

ST. JOHN, *January 17th*, 1882.



LIST OF PLANTS.

- a. **Clematis verticillaris**, *D. C.* Found at Saint Stephen by J. Vroom, and at Nashwaaksis by J. Moser, 1881.
- 7. **Thalictrum dioicum**, *L.* Grand Lake, G. U. Hay; Fredericton and Nashwaaksis, J. Vroom.
- 21 a. **ACONITUM NAPELLUS**, *L.* In an old garden at Fredericton, Vroom.
- 24.* **Caulophyllum thalictroides**, *Michx.* PAPPOOSE-ROOT. Found at Nashwaaksis by J. Moser, 1881.
- 24 a. **Brasenia peltata**, *Pursh.* Near Cox's Point, Grand Lake, Hay; at Saint Stephen and Fredericton, Vroom.
- 31 a. **Adlumia cirrhosa**, *Raf.* CLIMBING FUMITORY. A sport in gardens at Saint Stephen, Vroom.
- 45 a. **Draba incana**, *L.* WHITLOW-GRASS. Nashwaaksis, collected by J. Moser, 1881; said to have been found at Bathurst in June, 1881, by Mr. Chas. Lindon, of Buffalo, New York.
- 53 a. **Viola canina**, *L.*, var. **sylvestris**, *Regel.* Bathurst, 1881, R. Chalmers. Abundant near Saint John, Saint Stephen, and also on Grand Manan; Hay and Vroom.
- 57. **V. TRI-COLOR**, *L.* Escaped from gardens near Bathurst, Chalmers; on Ballast Wharf, Saint John, Hay.
- 68. **SILENE INFLATA**, *Smith.* Rather abundant in several sections of the Province.
- 71 a. **LYCHNIS VESPERTINA**, *Sibth.* EVENING LYCHNIS. Saint Stephen, Vroom.
- 71 b. **L. FLOS-CUCULI**, *L.* MEADOW LYCHNIS. Campbellton, Chalmers, June, 1877.
- 73. **Arenaria peploides**, *L.* Restigouche, Chalmers.
- 88 a. **Portulaca oleracea**, *L.* Saint Stephen, Vroom.
- 98. **Geranium Robertianum**, *L.* Lower Norton, collected by Arthur I. Trueman.
- 98 a. **ERODIUM CICUTARIUM**, *L'Her.* STORKSBILL. Ballast, Carleton, G. U. Hay.
- 113. **Polygala paucifolia**, *Willd.* Saint Stephen and Milltown, Vroom.
- 114. **TRIFOLIUM ARVENSE**, *L.* Lancaster, Hay.

- 115 a. *T. HYBRIDUM*, *L.* In clover field at Norton, Hay; Saint Stephen, Vroom.
117. *T. AGRARIUM*, *L.* Fredericton and other places, not uncommon, Vroom.
- 123 a. *MEDICAGO MACULATA* *Willd.* SPOTTED MEDICK. Carleton, on ballast heaps, Hay.
131. *LOTUS CORNICULATUS*, *L.* Has disappeared from Fairville. Found at Ballast wharf, Saint John, Hay.
- 137 a. *Apios tuberosa*, *Mench.* WILD BEAN; GROUND NUT. Occurs at Keswick Ridge and along banks of Saint John River near Fredericton; found also at Saint Stephen in 1881 by J. Vroom.
- 161 a. *Rubus occidentalis*, *L.* BLACK RASPBERRY; THIMBLEBERRY. Keswick Ridge, Hay, July, 1880. Said to occur in Westmorland County.
182. *Saxifraga Virginienis*, *Michx.* Mouth of Mactaquac, York County, Vroom, 1881.
186. *Penthorum sedoides*, *L.* Mouth of Jemseg, Hay.
194. *Circæa Lutetiana*, *L.* Keswick Ridge, Hay, 1880.
- 199.* *Ludwigia palustris*, *Ell.* WATER PURSLANE. Nashwaaksis. Collected by J. Moser, 1880; Saint Stephen, Vroom.
244. *Eupatorium ageratoides*, *L.* Lily Lake, Saint John, Hay, 1881.
- 252 a. *Aster æstivus*, *Ait.* var. *lætiflorus*, *Gray.* Kennebecasis River, near Saint John, Hay, 1881.
- 265 a. *Solidago bicolor*, *L.* var. *concolor*, *Gray.* Tattagouche River, Gloucester County, Chalmers, 1880.
- 310 a. *CARDUUS CRISPUS*, *L.* THISTLE. West side Courtenay Bay, City of Saint John; apparently naturalized, Hay, 1881.
- 313 a. *TRAGOPOGON PRATENSE*, *L.* MEADOW SALSIFY. Weed in Todd's field, Saint Stephen, Vroom, 1880.
- 321 a. *Lactuca Canadensis*, *L.*, var. *integrifolia*, *Torr. and Gray.* Norton, Hay, 1880.
- 322 a. *SONCHUS OLERACEUS*, *L.* COMMON SOW THISTLE. Is found sometimes with *S. ASPER*, *Vill.*, at Saint John and Saint Andrews; Hay and Vroom.
326. *Lobelia cardinalis*, *L.* On Magaguadavic, Saint Croix, and tributaries, G. F. Matthew and Vroom.
- 330 a. *Campanula aparinoides*, *Pursh.* Saint George, Vroom, 1880; Grand Lake, Hay, 1881.
- 330 b. *C. RAPUNCULOIDES*, *L.* About Saint John and Saint Stephen; Hay and Vroom, 1881.

331. **Gaylussacia dumoza**, *Torr. and Gray*. Saint Stephen, Vroom, 1881.
- 331 a. **G. frondosa**, *Torr. and Gray*. BLUE TANGLE; DANGLEBERRY. Grand Lake, Hay, 1881.
337. **Vaccinium corymbosum**, *L.* Grand Lake, Hay, 1881; Saint Stephen, Vroom.
- 348 a. **Pyrola chlorantha**, *Swartz*. Lily Lake, Saint John, Hay, 1881.
- 352 a. **Monotropa Hypopitys**, *L.* Lily Lake, Saint John, Hay, 1881; collected at Petitcodiac, Westmorland County, by John Brittain, 1881.
- 363 a. **ANAGALLIS ARVENSIS**, *L.* Ballast, Saint John, Hay, 1881.
- 368 a. **Aphyllon uniflorum**, *Torr. and Gray*. ONE-FLOWERED CANCER-ROOT. Nashwaaksis, Professor Fowler, 1880; Petitcodiac, collected by J. Brittain, 1881.
- 369 a. **Linaria Canadensis**, *Spreng.* WILD-TOAD FLAX. Saint Stephen, Vroom, 1881.
- 369 b. **L. CYMBALARIA**, *Mill.* IVY LINARIA. Ballast wharf, Saint John, Hay, September, 1881.
- 369 c. **L. MINOR**, *Desf.* Ballast wharf, Saint John, Hay, September, 1881.
380. **VERONICA AGRESTIS**, *L.* Ballast wharf, Saint John, Hay, 1881.
- 386 b. **Phryma Leptostachya**, *L.* LOPSEED. Keswick Ridge, Prof. Fowler and Mr. Hay, 1880.
- 402 a. **LAMIAM AMPLEXICAULE**, *L.* DEAD NETTLE. Saint Andrews, Vroom, 1881.
408. **Myosotis arvensis**, *Hoffm.* Saint Andrews, Vroom, 1881.
- 416 a. **DATURA STRAMONIUM**, *L.* COMMON STRAMONIUM, or THORN APPLE. Weed well established at Saint Stephen and Saint Andrews, Vroom.
- 418 **GENTIANA AMARELLA**, *L.*, var. **acuta**, *Hook., f.* Keswick Ridge; collected by G. H. Burnett, 1881.
419. **G. linearis**, *Froel.* Nashwaaksis; collected by J. Moser.
- 420 a. **Limnanthemum lacunosum**, *Grisebach*. FLOATING HEART. Saint Stephen; Vroom, 1881. Abundant in a Lake near residence of G. G. King, Esq., M. P., Salmon River, Queen's County; Hay, 1881.
427. **Asarum Canadense**, *L.* Rather common about Fredericton.
461. **EUPHORBIA CYPARISSIAS**, *L.* Roadside Nashwaak, J. Vroom, 1881.
- 517 a. **Symplocarpus foetidus**, *Salisb.* SKUNK CABBAGE. Found at outlet of Lake Utopia, Vroom, 1879. Mr. Matthew reports it at Milkish, King's County; and Dr. Duncan at Nigadoo River, Gloucester County.

- 520 a. **Sparganium minimum**, *Bauhin, Fries.* Campbellton, Chalmers.
- 539 a. **Orchis spectabilis**, *L.* SHOWY ORCHIS. Keswick, June, 1881; collected by Rev. Mr. McKiel.
- 546 a. **Habenaria lacera**, *R. Br.* RAGGED FRINGED ORCHIS. Collected at Petitcodiac by John Brittain, 1881.
- 550 a. **Spiranthes gracilis**, *Bigelow.* Collected by A. I. Trueman at Baie Verte, Westmorland County, 1876.
556. **Calypso borealis**, *Salisb.* Collected at Somerset Vale, Bathurst, by J. Meahan, 1881; also a fine bunch from vicinity of Indiantown, as early as 1861, by one of Prof. C. F. Hartt's pupils, and now in Herbarium of Natural History Society, Saint John.
558. **Liparis Læselii**, *Richard.* Fredericton, Vroom, 1879; and Grand Lake, Hay, 1881.
563. **Cypripedium spectabile**, *Swartz.* Occurs in York and Carleton Counties, Vroom; Restigouche, Chalmers.
568. **Trillium erectum**, *L.* Restigouche, Chalmers.
- 581 a. **Polygonatum biflorum**, *Ell.* SMALLER SOLOMON SEAL. Saint Stephen, Vroom, 1881.
- 583 a. **Allium tricoccum**, *Ait.* WILD LEEK. Petitcodiac; collected by J. Brittain, 1881.
- 598 a. **Xyris flexuosa**, *Muhl. and Chapm.,* var. **pusilla**, *Gray.* YELLOW-EYED GRASS. Kendrick's Lake, Saint Stephen, Vroom, 1881; collected by A. I. Trueman at Point de Bute, Westmorland County, 1876.
- 601 a. **Eleocharis Robbinsii**, *Oakes.* Kendrick's Lake, near Saint Stephen, Vroom, 1881.
719. a. **Triticum dasystachyum**, *Gray.* New Mills, Restigouche, Chalmers, September, 1880.
765. **Woodsia ilvensis**, *R. Br.* Found at Keswick, Nashwaaksis, Saint Stephen, and near Green Head, Saint John.
- 780 a. **Selaginella rupestris**, *Spreng.* Collected by G. H. Burnett at Keswick, 1881.



A CATALOGUE
OF THE
BIRDS OF NEW BRUNSWICK,
WITH
BRIEF NOTES
RELATING TO
THEIR MIGRATIONS, BREEDING, RELATIVE
ABUNDANCE, ETC.

BY
MONTAGUE CHAMBERLAIN.

SAINT JOHN, NEW BRUNSWICK.
1882.



INTRODUCTION.

IT seems desirable that an Annotated Catalogue of the Birds which occur within the limits of this Province should be issued for the information of our people, as well as for the use of students who may desire to trace the geographical distribution of species, as the only complete list of New Brunswick Birds which has been previously published is one that appears in the Appendix to "Field and Forest Rambles,"* by Dr. ADAMS, a book that is but little known, and the list of Birds in it contains very meagre information, being little more than a mere recital of the names of two hundred and forty-eight species.

"A Partial Catalogue of the Birds of Grand Manan," by Mr. HAROLD HERRICK, is published in the *Bulletin of the Essex Institute*, for 1873, and contains some interesting and valuable notes on one hundred and ninety-four species.

There is a report of the Birds of an adjacent region, based on the observations of Mr. GEORGE A. BOARDMAN, published by Prof. VERRILL in the Proceedings of the Boston Society of Natural History, vol. ix., 1862, entitled, "A Catalogue of the Birds found in the vicinity of Calais, Maine, and about the Islands of the Bay of Fundy." This catalogue has been accepted by Ornithologists as an authentic record for Eastern Maine, and although, from their geographical relation, the fauna of the two regions must necessarily be somewhat similar, yet even between Calais and Saint John many interesting differences have been noted, and in a large number of cases the report for Eastern Maine will not apply to New Brunswick.

But, apart from the reasons already stated, neither Mr. BOARDMAN's catalogue nor Dr. ADAMS' fully meet the requirements of the present day, for both are written in a system of

*"Field and Forest Rambles," with notes and observations on the Natural History of Eastern Canada, by A. LEITH ADAMS, M.A., M.B., F.R.S., F.G.S., Staff-Surgeon-Major; London: HENRY S. KING & Co., 1873. Dr. ADAMS was stationed in New Brunswick in 1867-8, attached to the 22nd Regiment.

nomenclature and classification that is now obsolete, and neither contain the more recent records. This latter reason derives its importance from the fact that each year new species are being discovered, and something new found out about the habits of others; so that no report of any given area can be properly called either perfect or complete, but requires frequent revision.

An Annotated Catalogue of our Birds being desirable and necessary, the present paper is offered as a first instalment of such a work, and will be supplemented by additions and revisions as opportunity for further investigation occurs.

As yet, a systematic study of the Counties of Saint John and King's only has been made, and for this reason the Catalogue is divided in two divisions; the first embracing the result of observations made in these Counties; the second containing the names of species which have not been found within that area, but which have been observed elsewhere in the Province, and is chiefly compiled from previous records, many quotations being made from the lists already mentioned.

The notes are neither as complete nor exact as could be made, many questions being yet undetermined; but, as a whole, the Catalogue will serve as a starting point, and the unscientific reader, for whom it is especially intended, will find in it a fairly full account of the Birds of the Southern section of the Province. Of the Northern and Central Sections very little systematic investigation has been made, and I anticipate many interesting facts are awaiting discovery there; such, for instance, as the extreme Northern limit of the breeding area of some species, and the Southern limit of that of others.

While I have assumed the responsibility for the accuracy of this paper, I cannot claim that it is based solely upon my own observations, for several other members of this Society, who are interested in Ornithology, have contributed more or less information. To Mr. HAROLD GILBERT, especially, I am indebted for assistance. His notes on the Singing-Birds and Shore-Birds, the result of some ten years close and careful observation, have been particularly valuable; indeed, without them the report on these groups would have been very meagre. From Mr. JAMES W. BANKS I have received no inconsiderable aid in determining the

breeding of many species, he having made the Oölogy of this locality a specialty ; and from Messrs. JOHN HAMMOND, JOHN C. ALLISON, PETER CAMPBELL, FREDERICK W. DANIEL, ALFRED MORRISEY, and W. N. GOULD I have received valuable information.

I have also to thank JAMES H. CARNALL, Taxidermist, of this City, and Mr. GEORGE A. BOARDMAN, of Saint Stephen, for useful notes, and regret that an offer kindly made me by Mr. BOARDMAN to place at my service the result of his extensive observations in this Province did not reach me until the manuscript of the Catalogue was in the hands of the printer.

I will take this opportunity of expressing the thanks I owe Professor SPENCER F. BAIRD and Mr. ROBERT RIDGWAY of the Smithsonian Institution, Washington, for courteously rendered assistance in identifying unknown species, and for other favors ; and I am also deeply indebted to Mr. WILLIAM BREWSTER, of Cambridge, and Mr. E. O. DAMON, of Northampton, Mass., for similar kind services ; nor can I forget to make mention of the valuable information received from Mr. H. A. PURDIE, of Boston, whose friendly aid merits my best thanks.

In writing the Catalogue, I have copied the names and arrangement of the species adopted by Mr. RIDGWAY for the "NOMENCLATURE OF NORTH AMERICAN BIRDS," issued by the Smithsonian Institution in 1881. In species that have a local name differing from the common name of the "Nomenclature," I have added the local name, and placed it in quotation marks.

M. C.

Saint John, March, 1882.





BIRDS OF NEW BRUNSWICK.

SECTION A.

SPECIES WHICH OCCUR IN ST. JOHN AND KING'S COUNTIES.

FAMILY TURDIDÆ. THE THRUSHES.

1. WILSON'S THRUSH, "TAWNY THRUSH." (*Hylocichla fuscescens*).

This species is a summer resident, and builds its nest here. It is rarely met with in the immediate vicinity of the city of Saint John, but occurs more frequently about Hampton and at Westfield, though it is nowhere a common bird.

(THE GRAY-CHEEKED THRUSH, or "ALICE'S THRUSH," as it was formerly called, should be found here, but has as yet escaped detection, although during the last two seasons considerable search was made for it).

2. OLIVE-BACKED THRUSH. (*Hylocichla ustulata swainsoni*). u

A summer resident, breeding in abundance. It usually arrives from the south during the first week of May, and remains until the last week of September.

3. HERMIT THRUSH, "SWAMP ROBIN." (*Hylocichla unalasæ pallasii*).

Breeds abundantly, arriving and departing about the same time as the Olive-backed.

4. AMERICAN ROBIN. (*Merula migratoria*).

The most abundant of our Thrushes, building its nest in all suitable localities. The larger part of these birds are early summer residents, arriving from the south early in April; but a small number have been observed every winter, and

occasionally large flocks are seen, as, for instance, in January, February, and March, 1880, when great numbers visited the gardens and suburbs of Saint John during the warmer weather, and retired to the woods when the cold increased.

5. **CATBIRD.** (*Galeoscoptes carolinensis*).

A rather rare, though irregular summer resident.

FAMILY SAXICOLIDÆ. THE STONECHATS, &c.

6. **BLUEBIRD.** *Sialia Sialis*.

Only three authentic instances of the occurrence of this species are known. Mr. HAROLD GILBERT saw one on Mount Pleasant in March, 1877. Mr. BANKS saw one near Millidgeville in June, 1879. He thinks this bird must have had a nest near, as there was food in its mouth, as if for its young. Mr. HENRY GILBERT shot one specimen at Rothesay on April 26, 1881. The species is given by Mr. BOARDMAN as a rare summer visitant near Calais.

FAMILY SYLVIIDÆ. THE SYLVIAS.

7. **RUBY-CROWNED KINGLET.** (*Regulus calendula*).

An uncommon summer resident. Mr. BANKS has taken one nest, built in a dense fir thicket, in the crotch of a limb.

8. **GOLDEN-CROWNED KINGLET.** (*Regulus satrapa*).

This is a common resident, but appears most abundant during the fall and winter months, when it is met in company with the chickadees. Breeds.

FAMILY PARIDÆ. THE CHICKADEES.

9. **BLACK-CAPPED CHICKADEE.** (*Parus atricapillus*).

This species also occurs throughout the year, and breeds abundantly.

10. HUDSONIAN CHICKADEE. "HUDSON-BAY TIT." (*Parus hudsonicus*).

Is met with occasionally at all seasons, and builds its nest here.

FAMILY SITTIDÆ. THE NUTHATCHES.

11. WHITE-BELLIED NUTHATCH. (*Sitta carolinensis*).

This species has been observed in early spring and in summer, though uncommon at all seasons; but I can learn of no instance of its occurrence in winter. It is, however, given by Mr. BOARDMAN as a resident in the vicinity of Calais.

12. RED-BELLIED NUTHATCH. (*Sitta canadensis*).

Usually an uncommon resident; but during the summer of 1878 it was quite abundant, building its nest in all suitable localities.

FAMILY CERTHIIDÆ. THE CREEPERS.

13. BROWN CREEPER. (*Certhia familiaris rufa*).

A rather rare summer resident; breeds.

FAMILY TROGLODYTIDÆ. THE WRENS.

14. WINTER WREN. (*Anorthura troglodytes hyemalis*).

A common summer resident; breeds.

FAMILY SYLVICOLIDÆ. THE WARBLERS.

15. BLACK-AND-WHITE CREEPER. (*Mniotilta varia*).

A summer resident; breeds. They are common about the suburbs of Saint John only for a few weeks after arrival from the South, and again for a few weeks on their return in the fall, spending the summer a short distance inland; though an occasional pair have been known to remain and build near the city.

16. **NASHVILLE WARBLER.** (*Helminthophaga ruficapilla*).

A common summer resident; breeds.

17. **TENNESSEE WARBLER.** (*Helminthophaga peregrina*).

A rather common summer resident; breeds.

18. **BLUE YELLOW-BACKED WARBLER.** (*Parula americana*).

A rare summer resident. During the fall of 1880, two were taken at Indiantown; and on June 23, 1881, I collected one at Hampton. On September 30, 1881, Mr. GEORGE THOMAS found four that had been killed by flying against the light-house at Point Lepreaux.

19. **SUMMER YELLOW BIRD.** (*Dendræca æstiva*).

This is an abundant summer resident, and is one of the few species of the *Sylvicolidae* that is equally as numerous in the immediate vicinity of Saint John throughout the entire summer as during the migrations; for, although representatives of most of the other species that visit us nest in the suburbs, the great majority of these birds stay but a few weeks, gradually disappearing before the first of June, and retiring inland some twenty miles or more, perhaps to get rid of the fog and continuous humid atmosphere of the coast, and to enjoy the higher and more constant temperature, which, even at that short distance, exhibits a marked difference.

The Yellow Warblers, however, continue to make their homes with us year after year, building their nests in aggravating proximity to the suburban haunts of the egg-greedy street gamins, who each season pillage and destroy a large number of these daintily made homes.

20. **BLACK-THROATED BLUE WARBLER.** (*Dendræca cærulescens*).

A rare summer resident. Mr. H. A. PURDIE identified the song of one at Hampton, June 20, 1881. Mr. GILBERT has collected two specimens.

21. **YELLOW-RUMP WARBLER.** (*Dendræca coronata*).

An abundant summer resident, arriving from the south from the 5th to the 15th of May; breeds.

22. **BLACK-AND-YELLOW WARBLER.** "MAGNOLIA WARBLER." (*Dendræca maculosa*).

An abundant summer resident, building in the suburbs of Saint John, and all suitable localities.

23. **CHESTNUT-SIDED WARBLER.** (*Dendræca pennsylvanica*).

A rare summer resident. A specimen in the collection of the NATURAL HISTORY SOCIETY was taken by Mr. J. MORRISON, June 19, 1881, near Lily Lake. Given by Mr. BOARDMAN as common at Calais.

24. **BAY-BREASTED WARBLER.** (*Dendræca castanea*).

An occasional summer resident. A specimen in the Natural History Museum was taken at Lily Lake, May 30, 1881, by Mr. DANIEL.

25. **BLACK-POLL WARBLER.** (*Dendræca striata*).

Common during the spring and fall migrations; occasionally met with in the summer.

26. **BLACKBURNIAN WARBLER.** (*Dendræca blackburniæ*).

An occasional summer resident. I collected one at Sutton on May 28, 1881.

27. **BLACK-THROATED GREEN WARBLER.** (*Dendræca virens*).

A common summer resident, remaining near Saint John during the summer months, and breeding everywhere.

28. **YELLOW RED-POLL WARBLER.** (*Dendræca palmarum hypochrysea*).

This is the first of the warblers to arrive in the spring, and is abundant near Saint John early in the season, but usually leaves the coast in a short time, often before the next comer of this family, the yellow-rump, puts in an appearance; though in 1877 a large number of them built their nests near this city.

29. **GOLDEN-CROWNED THRUSH. "OVEN BIRD."** (*Siurus auricapillus*).

A common summer resident; breeds.

30. **SMALL-BILLED WATER THRUSH.** (*Siurus naevius*).

A summer resident, but not a common bird. Three heard singing at Hampton, and one taken at Taylor's Island on July first, are the only records of its occurrence my note-book for 1881 contains.

31. **MOURNING WARBLER.** (*Geothlypis philadelphia*).

This species had not been observed in this locality prior to 1880; but in June of that year, a cat attached to the establishment of the light-house keeper on Partridge Island carried several specimens to her rising family, and during the last week in May of 1881 this same feline collector again produced evidence of the occurrence of the species on the Island; but not a single example could be found there on June 8th, nor on several other days during the summer when the Island was searched for it. Mr. H. B. BAILEY informed me that he heard several individuals singing at Hampton on June 23, 1881.

32. **MARYLAND YELLOW-THROAT.** (*Geothlypis trichas*).

An abundant summer resident. Is common near Saint John throughout the season; breeds.

33. **BLACK-CAPPED YELLOW WARBLER, "WILSON'S BLACK-CAP."** (*Myiodioetes pusillus*).

An uncommon summer resident; arrives in vicinity of Saint John early in May; breeds.

34. **CANADIAN FLYCATCHING WARBLER.** (*Myiodioetes canadensis*).

An occasional summer resident. A nest with eggs, taken June, 1880, is in Mr. BANKS' collection.

35. **AMERICAN REDSTART.** (*Setophaga ruticilla*).

A summer resident; breeds abundantly everywhere.

FAMILY VIREONIDÆ. THE VIREOS, OR GREENLETS.

36. RED-EYED VIREO. (*Vireosylvia olivacea*).

A common summer resident in the interior, where it nests, but found in the vicinity of the coast only during the migrations.

37. BLUE-HEADED VIREO. SOLITARY VIREO. (*Lanivireo solitarius*).

Mr. H. A. PURDIE heard one singing at Hampton on June 21, 1881, and several other instances of its occurrence are known; and though I can give no data for these, they appear to be sufficiently authentic to warrant the species being recorded as a rare summer resident. Given by Mr. BOARDMAN as breeding at Calais, but not common.

38. WHITE-EYED VIREO. (*Vireo noveboracensis*).

Mr. HAROLD GILBERT shot one of this species at South Bay, on May 24, 1877.

FAMILY LANIIDÆ. THE SHRIKES.

39. GREAT NORTHERN SHRIKE. BUTCHER-BIRD. (*Lanius borealis*).

An uncommon fall and winter visitant.

FAMILY AMPELIDÆ. THE CHATTERERS, &c.

40. CEDAR WAX-WING. "CEDAR BIRD." "CHERRY BIRD." (*Ampelis cedrorum*).

A common summer resident; breeds. This species usually arrives in June and leaves early in the fall; but occasionally, when the weather has been mild, and the berries of the mountain-ash conspicuously abundant, large flocks have been seen during the early winter, and, in 1880, were observed in March. During the season of nidification they are rather

wary and shy, but in the fall, when they have eaten freely of mountain-ash berries, they become stupidly reckless, and are easily noosed.

FAMILY HIRUNDINIDÆ. THE SWALLOWS.

41. PURPLE MARTIN. (*Progne subis*).

This species is an uncommon summer resident at Saint John, but at Hampton and Westfield is quite common. It generally appears about the first week in May, but comes earlier if the weather to the southward has been unusually warm—has been seen as early as April 15. It leaves here about the end of August. Breeds.

42. CLIFF SWALLOW. "EAVE SWALLOW." (*Petrochelidon lunifrons*).

An abundant summer resident in town and country,—arriving and departing with the martins. Breeds.

43. BARN SWALLOW. (*Hirundo erythrogastra*).

An abundant summer resident; the first of the swallows to arrive, and the last to leave us, remaining sometimes as late as the first of October. Breeds.

44. WHITE-BELLIED SWALLOW. (*Taychycineta bicolor*).

A common summer resident. It is more abundant in the northern parts of the province, where it is known as the "singing swallow." Breeds.

45. BANK SWALLOW. "SAND MARTIN." (*Cotile riparia*).

A common summer resident; breeds.

FAMILY TANAGRIDÆ. THE TANAGERS.

46. SCARLET TANAGER. (*Pyrranga rubra*).

A very rare summer resident. I saw one at Torryburn, June 20, 1879, and examined two specimens taken near Hampton in 1880.

FAMILY FRINGILLIDÆ. THE FINCHES, SPARROWS,
BUNTINGS, &c.

47. PINE GROSBEAK. (*Pinicola enuncleator*).

This species usually puts in an appearance about the first week in October, occasionally during the last half of September, and has been seen on September 1st, remaining until March. Some seasons it is abundant, and again, in others, very rare.

48. PURPLE FINCH. "LINNETT." (*Carpodacus purpureus*).

A common summer resident; breeds.

49. AMERICAN CROSSBILL. (*Loxia curvirostra americana*).

A rather common resident. A pair were taken by Mr. GILBERT in July, 1879. Dr. ADAMS, in "Field and Forest Rambles," says "this species builds its nest in February and March, and departs in April."

50. WHITE-WINGED CROSSBILL. (*Loxia leucoptera*).

This species is common in both counties during the winter, and has been seen in May (1879), but has not been observed here in the summer months, although it is given by Mr. BOARDMAN as a resident near Calais, Maine, throughout the year. Dr. ADAMS says it builds in New Brunswick in January, and leaves the Province in April. OTTY CROOKSHANK, Esq., observed several nests back of Moosepath one February several years ago, and I have seen a nest in February with the bird setting on the eggs. This species was unusually abundant during the winter of 1879-80.

51. MEALY REDPOLL. (*Ægiothus canescens*).

This is one of the species that I have "heard about" only. Reports have reached me of its recent occurrence, but I am not satisfied that the identification has been unquestionable.

Mr. JOHN HAMMOND, who has always taken great interest in birds, informs me that some fifteen years ago it was fre-

quently seen here, usually in company with *linaria*. He says he has captured several of both species and kept them in cages, where the difference of plumage was readily distinguished.

52. COMMON REDPOLL. (*Ægiothus linaria*).

A winter visitant; some seasons quite abundant.

53. AMERICAN GOLDFINCH. "THISTLE BIRD." (*Astragalinus tristis*).

An abundant summer resident; breeding in all suitable localities.

54. PINE GOLDFINCH. (*Chrysomitris pinus*).

This species has been observed here at all seasons of the year; occasionally so common as to be almost abundant; at other times it is rarely met. Dr. ADAMS states that it breeds in mid-winter.

55. SNOW BUNTING. "SNOW BIRD." "WADDLIN." (*Plectrophanes nivalis*).

An abundant winter resident, arriving about the first of September, and departing with the cold weather.

56. IPSWICH SPARROW. (*Passerculus princeps*).

Mr. W. M. BREWSTER records taking one at Point Lepreaux April 11, 1876. (Bulletin Nuttall Orn. Club, vol. i. p. 52).

57. SAVANNAH SPARROW. (*Passerculus sanwicensis savanna*).

An abundant summer resident. On first arriving in the early spring it resorts to the upland fields, but as the nesting season approaches, it seeks the salt marshes and fields adjacent to the Bay of Fundy shore, where it builds.

58. GRASS FINCH. (*Poæcetes gramineus*).

The only known instance of the occurrence of this bird is one identified by Mr. PURDIE at Hampton, June 20, 1881.

59. **SHARP-TAILED FINCH.** (*Ammodromus caudacutus*).

Several specimens of this Finch were taken by Mr. PURDIE, Mr. DANIEL, and myself while collecting in the vicinity of Hampton in June, 1881.

60. **WHITE-CROWNED SPARROW.** (*Zonotrichia leucophrys*).

A very rare summer resident. CARNELL collected one in 1877 and one in 1878. Mr. GILBERT examined another specimen taken in April, 1878. "Occurs during migrations" at Grand Manan (HERRICK). "Not common" at Calais (BOARDMAN).

61. **WHITE-THROATED SPARROW.** "OLD TOM PEABODY."
(*Zonotrichia albicollis*).

A summer resident, breeding abundantly in all suitable localities.

62. **TREE SPARROW.** (*Spizella montana*).

A somewhat irregular winter visitant; often very common, but in some seasons quite rare. Was more plentiful during winter of 1880-81 than before. Mr. GILBERT has collected it in May.

63. **CHIPPING SPARROW.** (*Spizella domestica*).

This species is a common summer resident, and breeds here.

64. **BLACK SNOWBIRD.** "IVORY-BILLED BLUEBIRD." (*Junco hyemalis*).

"Junco," as this species is familiarly styled by intimate acquaintances, is not a true "Snowbird" in this locality, for often it has left for a southern tour before the first flake of snow has fallen, and is not seen again until the strong sunshine and warm showers of early April have bared the fields of their winter dress, though this is not an invariable rule, for during some winters large numbers have been seen, generally in company with Tree Sparrows and Redpolls. "Junco" breeds here abundantly.

65. SONG SPARROW. (*Melospiza fasciata*).

A common summer resident; breeds. The average date of the arrival of this species is between the 7th and 15th of April, though the time of its coming, as indeed the coming of all our summer residents, varies very much, and is influenced by the condition of the season to the southward, for when the reports from Boston and Portland indicate a continued unusually high temperature, the birds are sure to come this far, even though the fields are covered deep with snow; but if, as it sometimes happens, our season is the more advanced, the fields bare, and the air soft and balmy, while to the southward the cold still lingers, the birds are late in arriving here.

We look upon this species as our first spring arrival, for though that semi-vagabond trio—Robin, Snowbird, and Crow—are generally at this time well represented, they are such an uncertain lot we are never quite sure these fellows may not have been lurking about the forests all winter living by their wits; but when we hear the sweet carol of the Song Sparrow, we know the spring-time has surely come.

We found broods of young birds flying at Hampton on June 20, 1881.

66. SWAMP SPARROW. (*Melospiza palustris*).

An uncommon summer resident; breeds.

67. FOX-COLORED SPARROW. (*Passerella iliaca*.)

This species passes through here on its way to a more northern summer resort, and again on its way south in the fall—though in this latter visit very few individuals appear, and but for a few days.

It can scarcely be called a true *spring* migrant, for usually the winter is still with us when it appears (about the first week in March), though on rare occasions it has been late in coming, and been greeted with bare fields and warm sunshine; and then, instead of the customary and simple, though contented, "tchip," with which it announces its presence, it has voiced its joy in such an exquisite melody that we have longed to have it stay.

68. **CHEWINK. TOWHEE.** (*Pipilo erythrophthalmus*).

Accidental. One shot at Irishtown on May 8, 1881, is preserved in the Museum of the Natural History Society.

69. **ROSE-BREADED GROSBEAK.** (*Zamelodia ludoviciana*).

A very rare summer resident. Several specimens have been taken at Hampton.

70. **INDIGO BUNTING.** (*Passerina cyanea*).

There is one skin in collection of Mr. JAMES MCGIVERN, Jr., which is said to have been taken in this locality. This is the only instance of its occurrence I have heard of, although it is quite common on the western shore of Nova Scotia, and is given by Mr. BOARDMAN as a rare summer visitant near Calais.

FAMILY ICTERIDÆ. THE STARLINGS AND ORIOLES.

71. **BOBOLINK.** (*Dolichonyx oryzivorus*).

A common summer resident. Arrives about last of May, and departs the first week of September. Breeds.

72. **COWBIRD. "COW BLACKBIRD."** (*Molothrus ater*).

A rare summer resident.

73. **RED-AND-BUFF-SHOULDERED BLACKBIRD. "RED-WINGED BLACKBIRD."** (*Agelaius phœniceus*).

A common summer resident; breeds.

74. **MEADOW LARK.** (*Sturnella magna*).

A rare summer resident. I saw one at Sutton on August 15, 1881.

75. **BALTIMORE ORIOLE. "GOLDEN ROBIN."** (*Icterus galbula*).

Very rare in this locality, but said to be more common near Woodstock.

76. **RUSTY BLACKBIRD.** (*Scolecophagus ferrugineus*).

An irregular summer resident. Arrives about last of April. Said to breed near Garnett's Brook.

77. **PURPLE GRACKLE.** "CROW BLACKBIRD." (*Quiscalus purpureus*).

An abundant summer resident, building its nest on trees and in barns in retired situations on the marshes. Leaves here usually about the middle of September. I saw one at Loch Lomond on October 23, 1881.

78. **BRONZED GRACKLE.** (*Quiscalus purpureus æneus*).

A common summer resident; always found in company with the Purple Grackle. Breeds.

FAMILY CORVIDÆ. THE CROWS, JAYS, &c.

79. **AMERICAN RAVEN.** (*Corvus corax carnivorus*).

This species was, a few years ago, not uncommon, but is now rarely seen. Nests have been discovered at Saint Martins, Dipper Harbor, and Black Point.

80. **COMMON CROW.** (*Corvus frugivorus*).

An abundant summer resident, usually breeding in communities. During every winter a few are seen, and some seasons large flocks remain. A favorite winter haunt is Courtenay Bay when the tide has left the sand flats bare.

A race of Crows that feed only on fish and gleanings of the sea visit Mace's Bay every spring, arriving about the first of February with the schools of herring, and remaining until the middle of April. It often flies in company with the Gulls, and, like them, dips to the surface of the water, but has never been observed to dive under it. During the evening it frequents the shores of the creeks and streams in search of shell fish, and is most active at this hour and in the early morning, but during mid-day is rarely seen away from the Islands. In appearance it differs little from the ordinary crow; it is some-

what smaller in size, and its beak is rather sharper; its voice, also, is of a slightly different tone. It was, however, readily recognized by some miners, who first drew attention to it, they having been familiar with it at Cape Breton, where, I understand, it is quite common, and receives a distinctive name.

The first specimens I examined were two that had been caught in a trap baited with fish and set near the shore. A number of the ordinary crows flew around the trap without being tempted, but so soon as these fish-eaters caught sight of the bait, they eagerly flew to it and were captured. I sent one to Mr. WILLIAM BREWSTER, who kindly compared it with a large series of skins at his command, and decided it to be a common crow.

81. **BLUE JAY.** (*Cyanocitta cristata*).

An abundant resident; breeds.

82. **CANADA JAY.** "MOOSE BIRD." "WHISKEY JACK."
(*Perisoreus canadensis*).

An abundant resident. Dr. ADAMS states that it brings up two broods, one in mid-winter and another in spring.

FAMILY ALAUDIDÆ. THE LARKS.

83. **SHORE LARK.** (*Eremophila alpestris*).

A winter visitant. Some few years ago it was quite abundant, but lately has been rather uncommon.

FAMILY TYRANNIDÆ. THE TYRANT FLYCATCHERS.

84. **KINGBIRD. BEE MARTIN.** (*Tyrannus carolinensis*).

An abundant summer resident; breeds.

85. **PHŒBE BIRD. PEWEE.** (*Sayornis fuscus*).

A common summer resident.

86. **OLIVE-SIDED FLYCATCHER.** (*Contopus borealis*).

A common summer resident; breeds.

87. **WOOD PEWEE.** (*Contopus virens*).

A common summer resident; breeds.

88. **YELLOW-BELLIED FLYCATCHER.** (*Empidonax flaviventris*).

A common summer resident; breeds.

89. **TRAILL'S FLYCATCHER.** (*Empidonax pusillus trilli*).

An uncommon summer resident; breeds.

90. **LEAST FLYCATCHER.** "CHEBEC." (*Empidonax minimus*).

A rare summer resident. Mr. GILBERT has collected four in six years. We heard one at Hampton on June 20, 1881.

FAMILY TROCHILIDÆ. THE HUMMINGBIRDS.

91. **RUBY-THROATED HUMMINGBIRD.** (*Trochilus colubris*).

A common summer resident; builds its nest in gardens everywhere. Arrives early in May and leaves early in September. Is abundant at Fredericton.

FAMILY CYPSELIDÆ. THE SWIFTS.

92. **CHIMNEY SWIFT.** "CHIMNEY SWALLOW." (*Chaetura pelagica*).

A common summer resident; breeds.

FAMILY CAPRIMULGIDÆ. THE GOATSUCKERS.

93. **WHIP-POOR-WILL.** (*Caprimulgus vociferus*).

An occasional summer resident. Is never met with in the immediate vicinity of Saint John, but occurs occasionally at Westfield, and more frequently between Gagetown and Fredericton.

94. **NIGHTHAWK.** (*Chordeiles popetue*).

An abundant summer resident. Have heard of eggs being found on flat gravelled roofs in Saint John.

FAMILY PICIDÆ. THE WOODPECKERS.

95. **HAIRY WOODPECKER.** *Picus villosus*.

This bird is an abundant resident, remaining throughout the year and breeding here.

96. **DOWNY WOODPECKER.** (*Picus pubescens*).

Abundant throughout the entire year; breeds.

97. **BLACK-BACKED THREE-TOED WOODPECKER.** (*Picoides arcticus*).

Resides throughout the year, but is uncommon.

98. **BANDED-BACKED THREE-TOED WOODPECKER.** (*Picoides tridactylus americanus*).

An occasional winter visitant.

99. **YELLOW-BELLIED WOODPECKER.** (*Sphyrapicus varius*).

An occasional summer resident; breeds.

100. **PILATED WOODPECKER. LOGCOCK.** (*Hylotomus pileatus*).

This species has not been taken in Saint John County, and it seldom occurs in King's; but it is common in the interior of the Province throughout the year.

101. **RED-HEADED WOODPECKER.** (*Melanerpes erythrocephalus*).

Neither Mr. GILBERT nor I have ever met this bird; but Mr. CARNELL says he shot three near Garnett's on May 24th, 1873; and Mr. BANKS reports seeing a pair in the same vicinity on May 24, 1879.

102. **YELLOW-SHAFTED FLICKER.** "GOLDEN-WINGED WOOD-PECKER." (*Colaptes auratus*).

An abundant summer resident; breeds. In 1879 Mr. GILBERT saw one at Mount Pleasant on December 4, and three following days, feeding on berries of the mountain ash.

FAMILY ALCEDINIDÆ. THE KINGFISHERS.

103. **BELTED KINGFISHER.** (*Ceryle alcyon*).

An abundant summer resident; breeds.

FAMILY CUCULIDÆ. THE CUCKOOS.

104. **YELLOW-BILLED CUCKOO.** (*Coccyzus americanus*).

A rare summer resident.

105. **BLACK-BILLED CUCKOO.** (*Coccyzus erythrophthalmus*).

This bird is never seen or heard near Saint John; but a short distance inland it is a not uncommon summer resident, and at Hampton is sometimes abundant.

FAMILY STRIGIDÆ. THE OWLS.

106. **AMERICAN LONG-EARED OWL.** (*Asio americanus*).

An occasional summer resident. A specimen in the Museum of the Natural History Society was taken in April, 1878. Given by HERRICK as "rather common" at Grand Manan.

107. **SHORT-EARED OWL.** (*Asio accipitrinus*).

I can learn of but three instances of the occurrence of this species in this locality—one in 1880 and two in 1881. The two last mentioned specimens are in the collection of the Natural History Society. One of them shows the "ochraceus" and "blackish-brown" coloring, described in the books, but the other has a faded appearance, and is of a dirty-white and blackish-ash plumage.

"Not very common" at Calais (BOARDMAN).

108. **BARRED OWL.** (*Strix nebulosa*).

An abundant resident; breeds. The common owl of our forest.

109. **RICHARDSON'S OWL. SPARROW OWL.** (*Nyctale tengmalmi richardsoni*).

A few specimens of this bird have been taken here. Of these that I have examined one was shot at Garnett's Creek in August, 1880, another was secured at the same place on December 31, 1881, and two were brought into CARNELL's store by a farmer on February 17, 1882.

110. **SAW-WHET OWL.** (*Nyctale acadica*).

Resides throughout the year, but is more common during the winter months than in summer.

111. **LITTLE SCREECH OWL. "MOTTLED OWL."** (*Scops asio*).

Mr. CARNELL has seen two or three skins of this species in the collection of the late Col. OTTY, of Hampton, that were said to have been taken in New Brunswick. Mr. J. MORRISON has a specimen taken at Black River.

Given by HERRICK as common, and breeding at Grand Manan.

112. **GREAT HORNED OWL.** (*Bubo virginianus*).

Reside throughout the year; are usually most abundant during the fall and winter.

113. **SNOWY OWL.** (*Nyctea scandiaca*).

A winter visitant; usually of uncommon occurrence, but occasionally more plentiful. During the winter of 1875-6 were abundant near Saint John. CARNELL shot one at Musquash on August 31, 1880, and several persons residing near that locality told him the owl had been observed continually in the vicinity of one piece of marsh land for four or five years. Mr. VANWART, of Jemseg, also reports one spending the summer near his farm.

seen for
1876-77

114. **AMERICAN HAWK OWL.** (*Surnia funerea*).

This is a rare bird with us, but I have examined several specimens taken in the Province. A skin in the collection of the Natural History Society was taken at Grand Lake November 7, 1881. One was taken at Black River in July, another at Fredericton Junction in August, and another at Garnett's in December.

FAMILY FALCONIDÆ. THE DIURNAL BIRDS OF PREY.

115. **WHITE GYRFALCON.** (*Hierofalco gyrfalco candicans*).

Several reports have reached me of "White Hawks" having been observed in various parts of the Province during the winter season, and Mr. BANKS informs me he is certain he has seen two examples, one at Millidgeville and another near Sandy Point; and knowing that this Falcon should be found here, I have placed its name in the list on the strength of these reports. It is given by Dr. ADAMS as an accidental visitant to the Province.

116. **AMERICAN PEREGRINE FALCON. DUCK HAWK.** (*Falco peregrinus nevius*).

This is probably a resident, though a very rare bird. Said to breed on cliffs on the Bay of Fundy shore, near Saint Martins.

117. **PIGEON HAWK.** (*Æsalon columbarius*).

A probable resident, although it has rarely been taken in winter. It breeds here.

118. **SPARROW HAWK.** (*Tinnunculus sparverius*).

A common summer resident; breeds.

119. **AMERICAN OSPREY. FISH HAWK.** (*Pandion haliaetus carolinensis*).

A summer resident, abundant in all parts of the Province; breeds. It frequently arrives before the ice is out of the rivers.

120. MARSH HAWK. "MARSH HARRIER." (*Circus hudsonius*).

A summer resident, and breeds. It is quite common in immature plumage, but I know of but one adult bird being taken here.

121. COOPER'S HAWK. (*Accipiter cooperi*).

An uncommon summer resident; breeds. Rare in adult plumage.

122. SHARP-SHINNED HAWK. (*Accipiter fuscus*).

A summer resident; breeds. This is the commonest of our Hawks; but few are observed in adult plumage.

123. AMERICAN GOSHAWK. (*Astur atricapillus*).

Resides throughout the year, and breeds. The young birds are common, but adult specimens are uncommon.

124. RED-TAILED HAWK. (*Buteo borealis*).

An uncommon summer resident; breeds. Dr. ADAMS reports it being very common in the interior.

125. RED-SHOULDERED HAWK. (*Buteo lineatus*).

Probably a resident, but is very rare near Saint John, though reported more common in the interior.

126. BROAD-WINGED HAWK. (*Buteo pennsylvanicus*).

A rather rare summer resident; breeds. Dr. ADAMS states that this and the Red-tailed Hawk (*Buteo borealis*), are the most abundant Hawks in the interior of the Province.

127. AMERICAN ROUGH-LEGGED HAWK. "BLACK HAWK."
(*Archibuteo lagopus sancti-johannis*).

A rare winter visitant, arriving early in the fall. Given by HERRICK as "common" at Grand Manan.

128. GOLDEN EAGLE. (*Aquila chrysaetus canadensis*).

There is one specimen in the Museum of the Mechanics' Institute, said to have been taken in this Province.

129. **BALD EAGLE. GRAY EAGLE.** (*Haliaeetus leucocephalus*).

This species resides here throughout the year, and is abundant, but retires from the coast during the winter. Its nest has been observed at Lepreaux and Red Head.

FAMILY COLUMBIDÆ. THE PIGEONS.

130. **PASSENGER PIGEON. "WILD PIGEON."** (*Ectopistes migratoria*).

Some twenty years ago this species visited the Province during the summer in great abundance, but it is now rarely seen, a few only being observed each year on heaths where blueberries and cranberries are plentiful.

131. **MOURNING DOVE.** (*Zenaidura carolinensis*).

Three of this species have been taken; one at Hampton in June, 1880, another shot by Mr. HENRY GILBERT at Rothesay, on October 17, 1881, and a third, now in the collection of the Natural History Society, shot at Milkish, September 30, 1881.

FAMILY TETRAONIDÆ. THE GROUSE, &C.

132. **CANADA GROUSE. SPRUCE PARTRIDGE.** (*Canace canadensis*).

A resident; breeds. Rather rare near Saint John, but quite common in the interior, and more abundant in the northern section of the Province.

133. **RUFFED GROUSE. "BIRCH PARTRIDGE."** (*Bonasa umbellus*).

A resident, breeding abundantly in all suitable localities.

There is considerable variation in the plumage of the Ruffed Grouse taken in this Province, for while many are referable to the typical *umbellus*, called by Dr. COUES the Brown Ruffed Grouse, a large number are of much paler

color, resembling the descriptions given of *umbelloides*, the Gray Ruffed Grouse of the Rocky Mountains; and between these extremes of color are several intermediate phases. There is also a difference in the markings of these birds. A large percentage of the darker race have a continuous subterminal black band on the tail-feathers, and spots on the chin and throat; and about the same average of the lighter race have immaculate chin and throat, and lack the black band on the two central feathers of the tail. But neither rule is invariable, for of a very large number of specimens examined in the Saint John market during several seasons, numerous examples were found of all possible combinations of these points of difference. I have not had an opportunity to compare specimens of the lighter colored birds with types of the Rocky Mountain race, but think it not improbable that both the Brown and Gray varieties are represented here, with numerous hybrids.

FAMILY ARDEIDÆ. THE HERONS.

134. GREAT BLUE HERON. "CRANE." (*Ardea herodias*).

A summer resident; abundant in all parts of the Province. Breeds.

135. GREEN HERON. (*Butorides virescens*).

A summer resident; rare in these Counties, but met with more frequently farther north.

136. BLACK-CROWNED NIGHT HERON. (*Nyctiardea grisea nœvia*).

A summer resident. Only a few have been observed near Saint John. It is reported abundant near Bathurst and at River Charlo.

137. AMERICAN BITTERN. "STAKE DRIVER." (*Botaurus lentiginosus*).

An abundant summer resident; breeds.

138. **LEAST BITTERN.** (*Ardetta exilis*).

A rare summer resident. The only district in which this species has as yet been observed is on the Bay of Fundy shore between Black River and Mispeck, where some five individuals were secured between 1877 and 1881.

FAMILY HÆMATOPODIDÆ. THE TURNSTONES, &c.

139. **TURNSTONE.** (*Streptilas interpres*).

This species is quite common along the Bay of Fundy shore during the autumn migrations; it is most abundant at Mace's Bay.

FAMILY CHARADRIIDÆ. THE PLOVER.

140. **BLACK-BELLIED PLOVER.** (*Squatarola helvetica*).

A common autumn visitant.

141. **AMERICAN GOLDEN PLOVER.** (*Charadrius dominicus*).

This species only occurs in the autumn on the way south, staying about four weeks. It was at one time abundant on the marshes and lowlands along the Saint John River, but is rarely seen there now, though it is still common about the shores of the Bay of Fundy.

142. **SEMIPALMATED PLOVER. "RINGNECK."** (*Ægialites semipalmatus*).

An abundant autumn visitant. It puts in an appearance about the first week of August, is most numerous about the first of September, and gradually disappears, all leaving by the middle of October.

FAMILY SCOLOPACIDÆ. THE SNIPE, &c.

143. **AMERICAN WOODCOCK.** (*Philohela minor*).

An abundant summer resident; breeds.

144. **WILSON'S SNIPE.** "ENGLISH SNIPE." (*Gallinago media wilsoni*).

A spring and autumn visitant. Not so abundant in this locality as at Sackville.

145. **RED-BREASTED SNIPE; GRAY SNIPE.** (*Macrorhamphus griseus*).

An autumn visitant. Were more plentiful during the fall of 1881 than had been previously observed.

146. **STILT SANDPIPER.** (*Micropalama himantopus*).

The only known instance of its occurrence is of three seen by Mr. DANIEL at Courtenay Bay on September 8, 1881. He secured one, which is now in the Museum of the Natural History Society.

147. **KNOT. ROBIN SNIPE.** (*Tringa canutus*).

A rare autumn visitant. One taken September 8th, 1881, at Saint Martins, by Mr. WM. ELLIS, is in the Museum of the Natural History Society.

148. **PURPLE SANDPIPER.** (*Arquatella maritima*).

A winter visitant; abundant at Mace's Bay. HERRICK records taking one at Grand Manan, August 13.

149. **PECTORAL SANDPIPER.** "JACK SNIPE." (*Actodromas maculata*).

A common autumn visitant. Rarely appears before September.

150. **BONAPARTE'S SANDPIPER.** (*Actodromas fuscicollis*).

An occasional autumn visitant. Three were taken at Quaco on October 26, 1881, by Mr. ELLIS.

151. **LEAST SANDPIPER.** "PEEP." *Actodromas minutilla*.

A very abundant autumn visitant.

152. **RED-BACKED SANDPIPER.** "DUNLIN." (*Pelinda alpina americana*).

A rare autumn visitant. One specimen was taken by Mr. MORRISEY at Courtenay Bay September 23, 1881. Mr. ELLIS secured four at Quaco on October 26, 1881.

153. **SEMIPALMATED SANDPIPER.** (*Ereunetes pusillus*).

The most abundant of our shore birds during the fall migrations, arriving from the northern breeding ground in August, and gradually moving south, the last being observed usually about the middle of October.

154. **SANDERLING.** (*Calidris arenaria*).

A common autumn visitant; usually the last of the shore birds to leave for the south.

155. **MARBLED GODWIT.** (*Limosa fæda*.)

Very rare near Saint John; said to be common on Bay Chaleur. A specimen in Museum of the Natural History Society was taken at Mace's Bay in the fall of 1879.

156. **HUDSONIAN GODWIT.** (*Limosa Hæmastica*.)

Has been observed occasionally during spring and fall migrations. Two specimens in the Museum of the Natural History Society were taken at Gagetown on October 25th, 1881, by Mr. GABE. DEVEBER.

157. **GREATER YELLOW-LEGS. TELL-TALE.** (*Totanus melano-leucus*).

Rare in the spring, but common during fall migrations. Arrives about the first week in August, and remains until the first week in October.

158. **YELLOW-LEGS.** (*Totanus flavipes*).

Occurs during the spring migrations, but not so numerous then as in the fall, when it is common.

159. SOLITARY SANDPIPER. (*Rhyacophilus solitarius*).

A common summer resident; most numerous in the immediate vicinity of Saint John in the autumn. Mr. BANKS took a nest and eggs at Lily Lake in June, 1880.

160. SPOTTED SANDPIPER. (*Tringoides macularius*).

A common summer resident; breeds.

161. LONG-BILLED CURLEW. "SICKLE-BILLED CURLEW."
(*Numenius longirostris*).

A rare autumn visitant; said to be common on the shore of the Gulf of Saint Lawrence from Point du Chene north.

162. HUDSONIAN CURLEW. (*Numenius hudsonicus*).

An uncommon autumn visitant.

163. ESQUIMAUX CURLEW. (*Numenius borealis*).

A rare autumn visitant.

FAMILY PHALAROPODIDÆ. THE PHALAROPES.

164. RED PHALAROPE. (*Phalaropus fulicarius*).

I have seen three large flocks of this species off Saint John harbour. It is not given by Mr. HERRICK in his Grand Manan list, but Mr. BOARDMAN informs me that it is not uncommon about the islands at the mouth of the bay, and that he has taken several nests.

165. NORTHERN PHALAROPE. (*Lobipes hyperboreus*).

The only occurrence of this species I can learn of in this locality is of one that was killed at Point Lepreaux light-house in September, 1881. It is now in the possession of Mr. GEO. THOMAS, light-house keeper.

Mr. HERRICK states that "thousands may be seen all summer" near Grand Manan.

FAMILY RECURVIROSTRIDÆ. THE AVOCETS, &c.

166. AMERICAN AVOCET. (*Recurvirostra americana*).

A representative of this species in the collection of the Natural History Society was taken at Saint Martins in 1880 by Mr. ELLIS, who reports taking a few every season for several years. He has usually found two together.

167. BLACK-NECKED STILT. (*Himantopus mexicanus*).

A representative of this species in the Museum of the Natural History Society was taken at Mace's Bay by Mr. JOHN ELLIS, who reports having observed several during former years, generally in September.

FAMILY RALLIDÆ. THE RAILS, &c.

168. VIRGINIAN RAIL. (*Rallas virginianus*).

A common summer resident; breeds.

169. SORA RAIL. (*Porzana carolina*).

An uncommon summer resident.

170. LITTLE YELLOW RAIL. (*Porzana noveboracensis*).

A rare autumn visitant. I examined one taken at Little River, September 20, 1881.

171. PURPLE GALLINULE. (*Ionornis martinica*).

Accidental. In September, 1880, a female of this species was taken near Gagetown, and on April 9, 1881, a male was shot by Mr. BELYEA at Irishtown. Both skins are preserved in the Museum of the Natural History Society.

172. FLORIDA GALLINULE. (*Gallinula galeata*).

Accidental. Mr. HENRY KETCHUM shot a male of this species at Dick's Lake in September, 1879.

173. **AMERICAN COOT.** "MUD HEN." (*Fulica americana*).

A summer visitant. This bird had been rarely found here previously to 1876, but since then it has been increasing each year, until now it is quite common.

FAMILY ANATIDÆ. THE GEESE, DUCKS, &c.

174. **SNOW-GOOSE.** (*Chen hyperboreus*).

Some fifteen years ago several specimens of this bird were taken near Saint John, and up to that time it had been met with occasionally each season; but since then it has been extremely rare, and the only late occurrence in the Province that is known is of one taken at Gagetown in December, 1880, and now in the collection of E. O. DAMON, Esq., Northampton, Mass.

It is given by Mr. HERRICK as "rare in winter" at Grand Manan.

175. **CANADA GOOSE.** "WILD GOOSE." (*Bernicla canadensis*).

Abundant during the spring and fall migrations.

176. **BRANT.** (*Bernicla brenta*).

Abundant during the spring migrations. In the fall they generally pass over these counties without alighting, though they are abundant on the Bay Chaleur.

177. **MALLARD.** (*Anas boscas*).

A pair of these birds presented to the Natural History Society by Dr. C. K. FISKE, were taken near Hampton by Col. OTTY some fifteen years ago. Mr. CARNELL had a male sent him, said to have been taken in this Province, and Mr. HENRY GILBERT secured a pair in August, 1880, near Rothesay.

178. **BLACK MALLARD.** "BLACK DUCK." (*Anas obscura*).

This species is abundant through the summer months; in the winter it is rather uncommon, and is then found in company with the sea ducks feeding at the mouths of the rivers and streams emptying into the Bay of Fundy.

179. **PINTAIL.** (*Dafila acuta*).

This species was not uncommon here some eight or ten years ago, but the only known recent instance of its occurrence anywhere in the Province is of a female and young brood seen on the Tobique River in September, 1879, by Mr. CARNELL.

180. **BALDPATE.** "WIDGEON." (*Mareca americana*).

Very rare. Mr. HENRY DUFFELL shot one off the "Ballast" wharf, Saint John, in January, 1880.

181. **SHOVELLER.** "SPOON-BILL." (*Spatula clypeata*).

An occasional individual has been observed on the Saint John River late in the fall.

182. **BLUE-WINGED TEAL.** (*Querquedula discors*).

A common summer resident.

183. **GREEN-WINGED TEAL.** (*Nettion carolinensis*).

A common summer resident.

184. **WOOD DUCK.** **SUMMER DUCK.** (*Aix sponsa*).

A rare summer resident; breeds.

185. **SCAUP DUCK.** "BLACKHEAD." "BLUEBILL." (*Fulix marila*).

Col. OTTY took one at Hampton some years ago, and Mr. McMANUS shot a male and female near the same place in the fall of 1878. A specimen in the Natural History Society's collection was taken near Gaagetown by Mr. HERBERT W. HARRISON on November 10, 1881.

186. **CANVAS-BACK.** (*Æthya vallisneria*).

Mr. CARNELL has had one specimen sent him, said to have been taken in this Province. Mr. E. C. SUTTON, who is familiar with the appearance of the bird, saw a flock in Grand Bay, on the Saint John River, several times during the fall of 1879.

187. **BARROW'S GOLDEN-EYE.** (*Clangula islandica*).
A not uncommon winter visitant.
188. **AMERICAN GOLDEN-EYE. "WHISTLER."** (*Clangula glaucium americana*).
Rather common during the fall and winter.
189. **BUTTERBALL. BUFFLEHEAD. "DIPPER."** (*Clangula albeola*).
A common resident; breeds.
190. **HARLEQUIN DUCK. "LORD AND LADY."** (*Histrionicus minutus*).
A rare spring and autumn visitant. Mr. GEO. THOMAS, of Lepreaux, has seen it in Mace's Bay in winter.
191. **LONG-TAILED DUCK. OLD SQUAW. "SOU' SOUTHERLY."** (*Heralda Glacialis*).
Common at Mace's Bay in winter, and has been taken in summer.
CARNELL has shot young birds at Westfield in August.
192. **COMMON EIDER.** (*Somateria mollissima*).
This species is a rather common winter visitant, arriving early in the fall and remaining until late in the spring.
193. **KING EIDER.** (*Somateria spectabilis*).
A rare winter visitant.
194. **AMERICAN SCOTER. "BUTTER-BILLED COOT."** (*Edemia americana*).
An uncommon spring and autumn visitant. It arrives about March 20th, and if the weather is cold remains for two or three weeks, and halts for about the same length of time in the fall, appearing usually about the middle of September, though a few have been observed in August.
195. **AMERICAN VELVET SCOTER. "WHITE-WINGED COOT."** (*Melanetta velvetina*).
A common spring and autumn visitant.

196. **SURF DUCK.** "SURF SCOTER." (*Pelionetta perspicillata*).

A common spring and autumn visitant. Arrives about April 10th and continues northward about the middle of May. A few young birds remain at Mace's Bay all summer.

CARNELL shot two off Red Head in January, 1879.

197. **RUDDY DUCK.** (*Erismatura rubida*).

Two specimens in the brown and gray phase of plumage, said to have been taken in this Province, are in the Museum of the Natural History Society, and I have examined another killed by the telegraph wire at Lancaster Heights, September 8, 1881. These are the only instances of its occurrence known.

Given by Mr. HERRICK as uncommon at Grand Manan.

198. **AMERICAN SHELDRAKE.** "GOOSANDER." (*Mergus merganser americanus*).

A rather common resident.

199. **RED-BREASTED SHELDRAKE.** (*Mergus serrator*.)

An abundant summer resident; breeds.

200. **HOODED MERGANSER.** (*Lophodytes cucullatus*).

Occasionally seen during the spring and fall migrations.

FAMILY PELECANIDÆ. THE PELICANS.

201. **AMERICAN WHITE PELICAN.** (*Pelecanus erythrorhynchos*).

Accidental. A specimen in the Museum of the Natural History Society was shot at Point du Chene by Mr. ROBERT BUSTIN. Another is reported to have been shot near Cape Spencer in April, 1881. Mr. HERRICK records one taken at Grand Manan.

FAMILY GRACULIDÆ. THE CORMORANTS.

202. **COMMON CORMORANT.** "SHAG." (*Phalacrocorax carbo*).

A rather common resident. Breeds on islands in Mace's Bay.

203. **DOUBLE-CRESTED CORMORANT.** (*Phalacrocorax dilophus*).

A few individuals of this species have been occasionally observed about the mouth of Saint John harbour in the months of May, June, and September, but it has not been observed during any of the winter months.

FAMILY SULIDÆ. THE GANNETS.

204. **GANNET.** (*Sula bassana*).

Occasionally observed at Mace's Bay.

FAMILY LARIDÆ. THE GULLS, TERNS, &c.

205. **IVORY GULL.** (*Pagophila eburnea*).

On December 18, 1880, a Gull was shot off Saint John harbour and sent to the Smithsonian Institute, where it was identified as an immature bird of this species.

Given by Mr. HERRICK as a "winter visitant" of Grand Manan.

206. **KITTIWAKE GULL.** (*Rissa trydactyla*).

A rather common resident. Most numerous in winter.

207. **GLAUCOUS GULL. BURGOMASTER.** (*Larus glaucus*).

Rare. On December 23, 1880, one was shot from a flock of some half dozen in Saint John harbour, and sent to the Smithsonian Institute, where it was identified as an immature bird.

208. **WHITE-WINGED GULL.** (*Larus leucopterus*).

The only instance of its occurrence that is known is of a pair shot in Saint John harbour on April 2, 1881. I sent one to the Smithsonian Institute, where it was identified as an immature bird.

209. **GREAT BLACK-BACKED GULL.** (*Larus marinus*).

An uncommon resident.

210. **HERRING GULL.** (*Larus argentatus.*)

An abundant resident; breeds.

211. **BONAPARTE'S GULL.** (*Larus philadelphicæ.*)

Uncommon. Rare in adult plumage.

212. **COMMON TERN.** "WILSON'S TERN." "SEA SWALLOW."
(*Sterna fluviatilis.*)

A common summer resident.

213. **ARCTIC TERN.** (*Sterna macrura.*)

Rare. A skin in the possession of Mr. CARNELL was identified by Mr. H. A. PURDIE. A second specimen was taken off Saint John harbour in October, 1881.

FAMILY PROCELLARIIDÆ. THE PETRELS.

214. **STORMY PETREL.** MOTHER CAREY'S CHICKEN. (*Procellaria pelagica.*)

The only instance known of its occurrence near Saint John is of one picked up in the garden adjoining the residence of WM. JACK, Esq., in an exhausted condition, after a severe southerly gale.

215. **WILSON'S PETREL.** (*Oceanites oceanica.*)

Occasional in the vicinity of Point Lepreaux.

216. **LEACH'S PETREL.** (*Cymochorea leucorrhoa.*)

Occasional in the vicinity of Point Lepreaux.

FAMILY PODICIPIDÆ. THE GREBES.

217. **AMERICAN RED-NECKED GREBE.** (*Podiceps holböllii.*)

Occasional. One taken on Lily Lake, August 12, 1881, by Mr. SUTHERLAND.

218. **HORNED GREBE.** (*Dytes auritus.*)

An uncommon summer visitant.

219. **THICK-BILLED GREBE.** (*Podilymbus podiceps*).

A common summer visitant; breeds.

FAMILY COLYMBIDÆ. THE LOONS.

220. **LOON.** (*Colymbus torquatus*).

Two races of Loon spend the summer in New Brunswick, and breed here. They have plumage of similar colors and markings, but one is smaller than the other, being some six inches less in length.* The larger bird is common on the lakes and rivers in all sections of the Province, seldom seeking the salt water until the rivers freeze over, while the smaller is rarely found away from the sea shore; and though only seen occasionally in the Bay of Fundy, is quite abundant on the Gulf of Saint Lawrence.

The larger race generally arrive in the vicinity of Saint John early in April, and leave after the winter has set in.

221. **RED-THROATED DIVER.** (*Colymbus septentrionalis*).

A not uncommon summer resident, though adult males with the red patch on the throat are rather rare.

FAMILY ALCIDÆ. THE AUKS.

222. **RAZOR-BILLED AUK.** (*Utamania torda*).

Occur occasionally near Point Lepreaux and Partridge Island. Given by Mr. HERRICK as common near Grand Manan.

223. **SEA DOVE. DOVEKIE.** (*Alle nigricans*).

Occasionally blown in by heavy wind from the south during the winter. Given by Mr. HERRICK as a common winter resident of Grand Manan.

* I regret that a table of comparative measurements I had prepared was accidentally destroyed, and I am forced to write from memory of the relative size.

224. BLACK GUILLEMOT. "SEA PIGEON." (*Uria grylle*).

Common at Mace's Bay and Mispick.

225. COMMON GUILLEMOT. (*Lomvia troile*).

Occasional. Given by Mr. HERRICK as common in winter at Grand Manan.

SECTION B.

SPECIES WHICH HAVE NOT BEEN OBSERVED IN SAINT JOHN
OR KING'S COUNTIES, BUT WHICH OCCUR IN OTHER
PARTS OF THE PROVINCE.

-
226. STONE CHAT. (*Saxicola ænanthe*).

One shot by GEO. MOSES on Indian Island, August 25,
1879. (G. A. BOARDMAN, Bull. Nutt. Orn. Club, vol. v., p. 115.)

227. AMERICAN TITLARK. (*Anthus ludovicianus*).

"Occurs in spring and fall" at Grand Manan. (HERRICK.)

228. PROTHONOTARY WARBLER. (*Protonotaria citrea*).

Given by Dr. ADAMS* as a rare migrant.

229. CAPE MAY WARBLER. (*Perissoglossa tigrina*).

"Rare; may breed" at Grand Manan. (HERRICK.)
"Summer visitant. Common. Breeds," near Calais. (BOARD-
MAN.)

* Dr. ADAMS states that many of the land and a greater number of the water birds in his list are given on the authority of Mr. BOARDMAN. ("Field and Forest Rambles," pp. 296, 297.)

230. **PINE-CREEPING WARBLER.** (*Dendroica pinus*).

Given by Dr. ADAMS.

231. **WARBLING VIREO.** (*Vireosylvia gilva*).

"Not uncommon," near Calais. (BOARDMAN.)

232. **NORTHERN WAXWING.** (*Ampelus garrulus*).

Mr. BOARDMAN informs me that during some winters this species has been plentiful near Saint Stephen.

233. **LAPLAND LONGSPUR.** (*Centrophanes lapponicus*).

"Occurs in winter," at Grand Manan. (HERRICK.)

Mr. BOARDMAN informs me that he has occasionally seen examples of this species with flocks of Snow Buntings.

234. **YELLOW-WINGED SPARROW.** (*Coturniculus passerinus*).

Given by Dr. ADAMS.

235. **BLUE GROSBEAK.** (*Guiraca caerulea*).

Mr. HERRICK records one shot at Grand Manan in the spring of 1861, by Mr. CHENEY.

Mr. BOARDMAN reports taking several in 1862.

236. **ORCHARD ORIOLE.** (*Icterus spurius*).

Mr. BOARDMAN writes me that he has taken three examples of this species.

237. **GREAT-CRESTED FLYCATCHER.** (*Myiarchus crinitus*).

Is given in Dr. ADAMS' list. Mr. H. A. PURDIE informs me he found it near Woodstock in 1878.

238. **GREAT GRAY OWL.** (*Ulula cinerea*).

"Occurs in winter" at Grand Manan. (HERRICK.)

239. **TURKEY BUZZARD.** (*Cathartes aura*).

A solitary instance of its occurrence is recorded by Mr. BOARDMAN.

240. **BLACK VULTURE. CARRION CROW.** (*Catharista atrata*).
Mr. BOARDMAN writes me that he has had some half a dozen of this species taken near Saint Stephen.
241. **AMERICAN EGRET.** (*Herodias alba egretta*).
One shot at Grand Manan, November 3, 1878. (C. J. MAYNARD, in Bull. Nutt. Orn. Club, vol. iv., p. 63.)
242. **KILLDEER.** (*Oxyechus vociferus*).
Given by Dr. ADAMS.
243. **PIPING PLOVER.** (*Ægialites melodus*).
Given by Dr. ADAMS.
244. **CURLEW SANDPIPER.** (*Pelinda subarquata*).
Given by Dr. ADAMS.
245. **WILLET.** (*Symphemia semipalmata*).
"Rather common in August" at Grand Manan. (HERRICK.)
246. **RUFF.** (*Machetes pugnax*).
Given by Dr. ADAMS.
247. **BARTRAM'S SANDPIPER. FIELD PLOVER.** (*Bartramia longicauda*).
Given by Dr. ADAMS.
248. **GADWELL.** (*Chaulelasmus streperus*).
"Rare" at Grand Manan. (HERRICK.)
249. **LITTLE BLACKHEAD.** (*Fulix affinis*).
"Common" at Grand Manan. (HERRICK.)
250. **RING-BILLED BLACKHEAD.** (*Fulix collaris*).
Given by Dr. ADAMS.
251. **REDHEAD DUCK.** (*Æthya americana*).
"Not uncommon" at Grand Manan. (HERRICK.)

252. **LABRADOR DUCK.** (*Camptolæmus labradorius*).

"Very rare" at Grand Manan. (HERRICK.)

253. **BLACK SKIMMER.** (*Rhynehops nigra*).

Mr. G. A. BOARDMAN saw a large flock of this species in Bay of Fundy in summer of 1879. (Oölogist, vol. v., p. 13.)

254. **RING-BILLED GULL.** (*Larus delawarensis*).

Given by Dr. ADAMS.

255. **GULL-BILLED TERN.** (*Sterna anglica*).

One shot at Grand Manan, August, 1879. (Recorded on authority of G. A. BOARDMAN, by Mr. RUTHVEN DEANE, in Bull. Nutt. Orn. Club, vol. v., p. 63.)

256. **BLACK TERN.** (*Hydrochelidon lariformis surinamensis*).

Three shot at Grand Manan, August, 1879. (Recorded on authority of G. A. BOARDMAN, by Mr. RUTHVEN DEANE, in Bull. Nutt. Orn. Club, vol. v., p. 63.)

257. **SKUA GULL.** (*Magalestris skua*).

Given by Dr. ADAMS.

258. **POMARINE JAEGER.** (*Stercorarius pomatorhinus*).

"Common in autumn on the fishing ground" near Grand Manan. (HERRICK.)

259. **RICHARSON'S JAEGER.** (*Stercorarius crepidatus*).

"Common fall visitant" at Grand Manan. (HERRICK.)

260. **LONG-TAILED JAEGER.** (*Stercorarius parasiticus*).

"Common in Bay of Fundy in August." (BOARDMAN.)

261. **FULMAR PETREL.** (*Fulmarus glacialis*).

Recorded by Mr. HERRICK as occurring near the fishing grounds off Grand Manan in autumn.

262. GREATER SHEARWATER. (*Puffinus major*).

Recorded by Dr. ADAMS as a winter visitant.

263. MANX SHEARWATER. (*Puffinus anglorum*).

Given by Dr. ADAMS.

264. SOOTY SHEARWATER. (*Puffinus fuliginosus*).

Given by Dr. ADAMS.

265. BLACK-THROATED DIVER. (*Colymbus arcticus*.)

"Occurs in winter" at Grand Manan. (HERRICK.)

266. GREAT AUK. (*Alca impennis*).

Mr. WYMAN, in the *American Naturalist* for 1868, expresses the belief that this (now extinct) species probably lingered on the shores of the Bay of Fundy after the advent of the first settlers.*

267. COMMON PUFFIN. (*Fratercula arctica*).

Given by Dr. ADAMS.

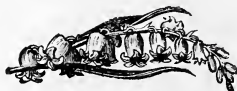
268. LARGE-BILLED PUFFIN. (*Fratercula arctica glacialis*).

Given by Dr. ADAMS.

269. TUFTED PUFFIN. (*Lunda cirrhata*).

Given by Dr. ADAMS.

* "Field and Forest Rambles," p. 36.



OFFICERS OF THE SOCIETY

FOR 1882.

President :

LeB. Botsford, M. D.

Vice-Presidents :

G. F. Matthew, M.A. George U. Hay.

Treasurer: :

James A. Estey.

Recording Secretary :

G. Ernest Fairweather.

Corresponding Secretary :

L. C. Allison, M. D.

Curators :

Robert Chalmers. M. Chamberlain. Fred. W. Daniel.

Members of Council :

W. F. Coleman, M.D. R. Penniston Starr. Gen. D. B. Warner.

STANDING COMMITTEES FOR 1882.

Physics and Chemistry :

W. F. Coleman, M.D. W. F. Best. George U. Hay.

Meteorology :

Gilbert Murdoch. William Murdoch.

Mineralogy :

G. F. Matthew, M.A. W. N. Gould. R. Penniston Starr.

Geology :

G. F. Matthew, M.A. W. N. Gould. Robert Chalmers.

Botany :

Geo. U. Hay. Robert Chalmers. James Vroom, (St. Stephen).

Invertebrate Zoölogy :

L. C. Allison, M.D. Mrs. C. E. Heustis. G. F. Matthew, M.A.

Vertebrate Zoölogy :

LeB. Botsford, M.D. L. C. Allison, M.D. W. F. Coleman, M.D.

Ornithology and Oölogy :

M. Chamberlain. Harold Gilbert. Jas. W. Banks. F. W. Daniel.

Library :

Robert Chalmers. W. J. Wilson. G. Ernest Fairweather.

Essays :

G. F. Matthew, M.A. W. F. Best. W. F. Coleman, M.D.

Lectures :

Geo. U. Hay. G. Ernest Fairweather. L. C. Allison, M.D.

Publishing :

M. Chamberlain. Robert Chalmers. Geo. U. Hay.

Hall :

M. Chamberlain. Geo. U. Hay. John Hammond.

LIST OF MEMBERS

OF THE

NATURAL HISTORY SOCIETY OF NEW BRUNSWICK

JANUARY 17TH, 1882.

Dr. LeB. Botsford, (*Life M.*)
 R. Penniston Starr, "
 Robert Matthew, "
 Geo. F. Matthew, "
 James B. Hegan, "
 H. F. Perley, "
 Wm. Jack,
 Dr. Inches,
 Dr. Hamilton,
 C. A. McDonald,
 Rev. G. M. Armstrong,
 Gilbert Murdoch,
 Dr. J. T. Steeves,
 James A. Estey,
 G. W. Whitney,
 D. H. Waterbury,
 Gen. D. B. Warner,
 J. T. C. McKean,
 W. N. Gould,
 G. Ernest Fairweather,
 Wm. M. McLean,
 G. Herbert Lee,
 W. A. Jack,
 Dr. W. F. Coleman,
 W. F. Best,
 Geo. U. Hay,
 Robert Chalmers,
 W. F. Burditt,
 H. S. Bridges,

D. P. Chisholm,
 Geo. F. Smith,
 J. S. Armstrong,
 Count DeBury,
 Dr. R. P. Cruikshank,
 F. R. Fairweather,
 J. C. Allison,
 W. F. Hatheway,
 M. V. Paddock,
 Alfred Morrissey,
 John D. Howe,
 W. H. Wilson,
 M. Chamberlain,
 John Hammond,
 A. A. Stockton,
 J. H. Carnell,
 Peter Campbell,
 Dr. S. H. Taylor,
 D. C. Dawson,
 H. Hayward,
 W. I. Whiting,
 Dr. Waters,
 T. W. Lee,
 C. H. Flewwelling,
 J. Milligan,
 Wm. Murdoch,
 Kilgour Shives,
 Dr. L. C. Allison,
 Jonas Howe,

Robert Rowe,
Dr. A. M. Ring,
Dr. Harding,
Thos. Dowling,
Harold Gilbert,
A. F. Emery,
T. W. Daniel,
F. W. Daniel,
J. W. Banks,
J. McB. Morrison,

Dr. T. J. O. Earle,
Dr. D. E. Berryman,
W. H. Parlee,
Dr. Chas. Holden,
Daniel McL. Smith,
Dr. Hutchinson,
C. A. Vaughan,
D. V. Roberts,
H. D. Likely,
W. P. Dole.



ASSOCIATE MEMBERS.

Mrs. G. F. Matthew,
“ J. A. Estey,
“ C. E. Heustis,
“ L. C. Allison,
“ G. U. Hay,
“ Albert Chamberlain,
“ M. Carr,
“ Campbell Fiske.
“ G. A. Hamilton,

Miss Murray,
“ Lilian Fairweather,
“ Minnie Ring,
“ Prudie Hartt,
“ Lottie Hartt,
“ Janie Barber,
“ Olive Nicholson,
“ Hattie Smith.

CORRESPONDING MEMBERS.

Edward Jack, C.E., <i>Fredericton.</i>	Henry How,
Prof. L. W. Bailey, <i>Fredericton.</i>	<i>King's Coll., Windsor, N.S.</i>
Roderick McKenzie, <i>Newcastle.</i>	J. M. Cramp, D.D.,
Dr. A. C. Smith, <i>Newcastle.</i>	<i>Acadia Coll., Wolfville, N. S.</i>
T. W. Bliss, <i>Richibucto.</i>	J. R. Sheraton, M.A., <i>Toronto.</i>
Dr. G. M. Duncan, <i>Bathurst.</i>	C. R. Matthew, M.A.,
Edwin Sharp, <i>Sussex.</i>	<i>Clinton, Ontario.</i>
David Wilson, <i>Gagetown.</i>	S. W. Hatheway, <i>Boston, Mass.</i>
Alex. Ross, <i>Dalhousie.</i>	O. C. Marsh,
G. A. Boardman, <i>Saint Stephen.</i>	<i>Yale College, New Haven.</i>
James Vroom, <i>Saint Stephen.</i>	W. M. Gabb,
Prof. Jas. Fowler, <i>Kingston, Ont.</i>	<i>San Francisco, Cal.</i>
J. B. Gilpin, <i>Halifax.</i>	Geo. H. Horn, M.D.,
Edward Gilpin, <i>Halifax.</i>	<i>San Francisco, Cal.</i>
J. M. Jones, <i>Halifax.</i>	A. S. Packard, <i>Cambridge, Mass.</i>
S. T. Rand, <i>Hantsport, N. S.</i>	Capt. H. Moody, A. D. C.
	Rev. M. P. Trueman.

